

AD-A104 199

ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/6 4/2
19310A MLRS, MISSILE NUMBERS BNO-14, BNO-33, AND BNO-34, ROUND --ETC(U)

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METEOROLOGICAL DATA REPORT

19310A MLRS

Missile Numbers BNO-14, BNO-33, BNO-34
Round Numbers V-175/MD-36, V-177/MD-38, V-176/MD-37
24 July 1981

by

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Program Support Coordinator
Phone Number (505) 679-9568
AVN Number 349-9568



ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

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UNITED STATES ARMY ELECTRONICS COMMAND

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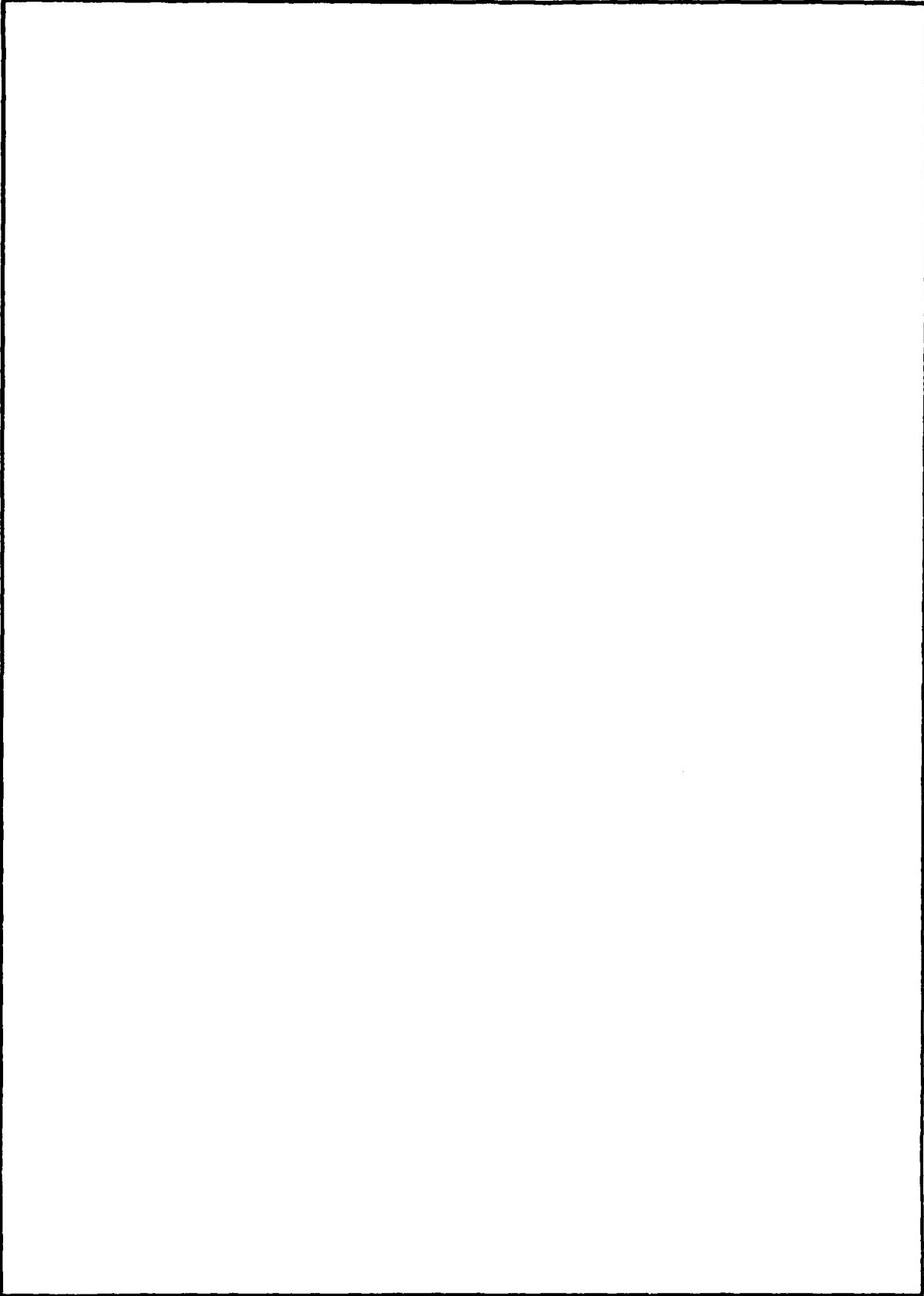
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INTRODUCTION

19310A MLRS, Missile Numbers BN0-14, BN0-33, and BN0-34, Round Numbers V-175/MD-36, V-176/MD-37 and V-177/MD-38, were launched from BRILLO, White Sands Missile Range (WSMR), New Mexico, at 1505:08, 1505:13 and 1631:05 MDT, 24 July 1981. The scheduled launch times were 1500, 1500:04.5 and 1500:09 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations:

a. Surface.

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), wind direction and speed, and cloud cover were made at the D-3 1/2 Met Site at T-0 minutes.

(2) Monitor of wind speed and direction from one anemometer was provided in the launch control room.

b. Upper Air:

(1) Low level wind data were obtained from Pilot-Balloon observations at:

SITE AND ALTITUDE

D-3 1/2	2000 Meters
MAL	1750 Meters
MAL	1750 Meters

(2) Air structure data (rawinsonde) were collected at the following Met Sites:

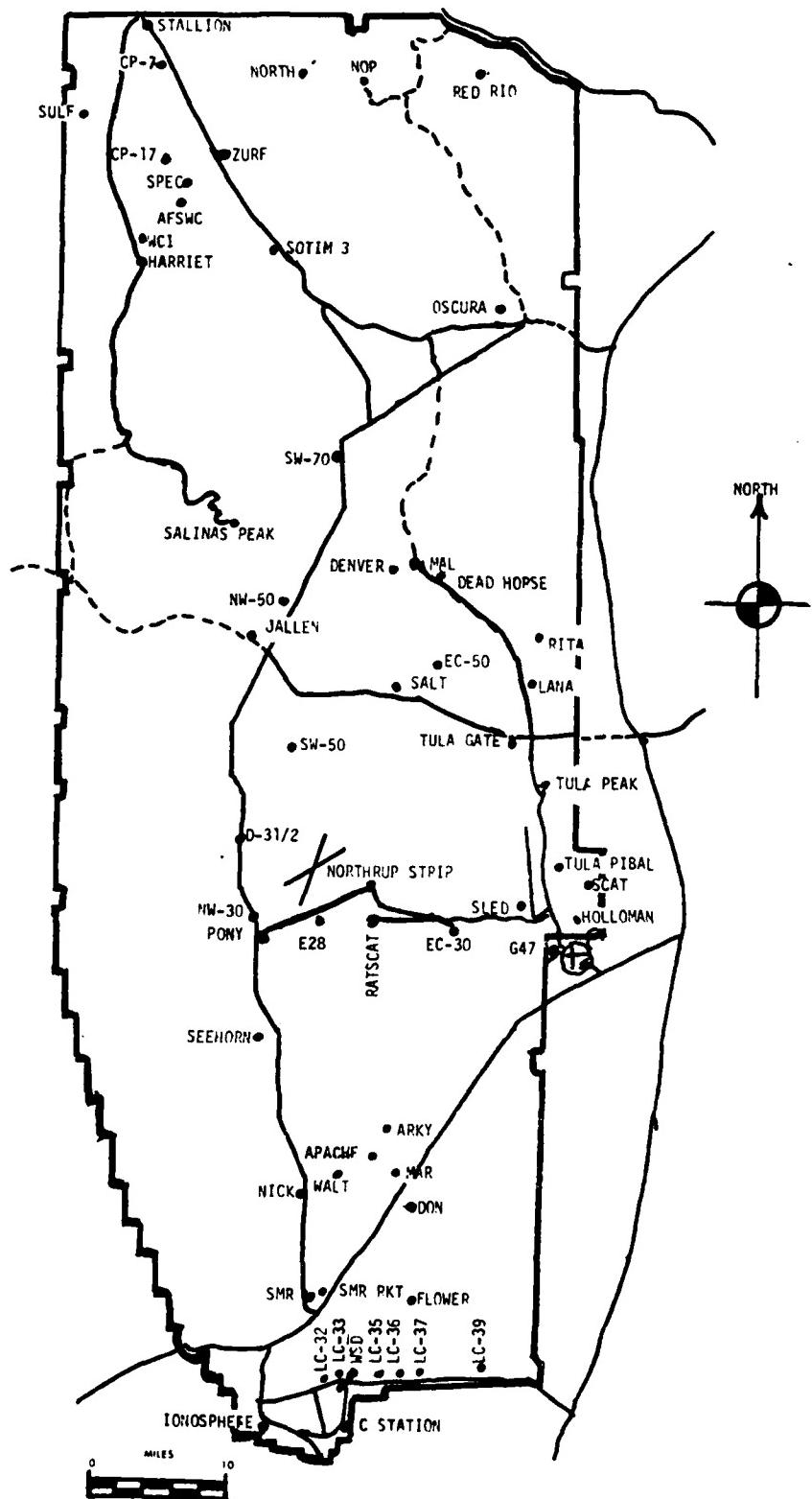
SITE AND TIME

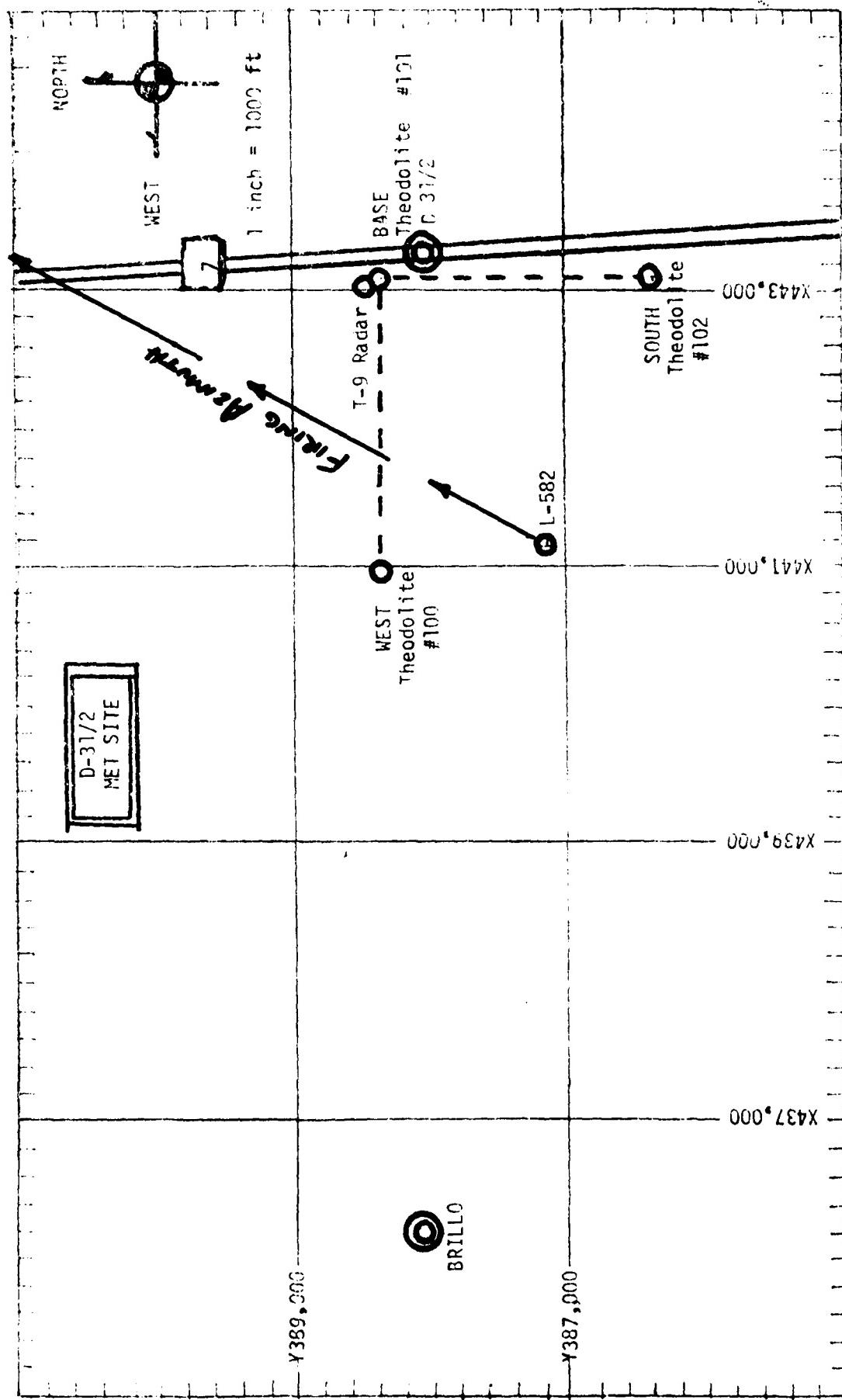
WSD	1000 MDT
NW-30	1200 MDT
Jallen	1230 MDT
NW-30	1500 MDT
Jallen	1700 MDT

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NTIS SPA&I	<input type="checkbox"/>
DTIC T&E	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	<input type="checkbox"/>
By	<input type="checkbox"/>
Distribution/	<input type="checkbox"/>
Availability Codes	<input type="checkbox"/>
Audit and/or	<input type="checkbox"/>
Dist	<input type="checkbox"/>
Special	<input type="checkbox"/>

A

WSMR METEOROLOGICAL SITES





PROJECT SURFACE OBSERVATION

TABLE 1

DATE M-D-J	JULY MONTH	1981 YEAR	PRESSURE mb's	TEMPERATURE OF °C	DEW POINT OF °C	RELATIVE HUMIDITY %	DENSITY gm/m ³	WIND DIRECTION deg's TN	SPEED kts	CHARACTER kts	VISIBIL- ITY
1500	875.6		37.0		9.6	19	973	270	02		40

STATION D-3 1/2

Y = 443,093.12 Y = 388,317.32 H = 3,964.4

OBSTRUCTIONS TO VISIBILITY	CLOUDS			REMARKS		
	1st LAYER AMT TYPE HGT	2nd LAYER AMT TYPE HGT	3rd LAYER AMT TYPE HGT			

PSYCHROMETRIC COMPUTATION

TIME:	MDT	1500		
DRY BULB TEMP.		37.0		
WET BULB TEMP.		19.1		
WET BULB DEPR.		17.9		
DEW POINT		9.6		
RELATIVE HUMID.		19		

TABLE 2

T-TIME PILOT-BALLOON MEASURED WIND DATA
DATE 24 July 1981

SITE: D-3 1/2
TIME: 1500 MDT
WSTM COORDINATES:
X= 443,093.12
Y= 388,317.32
H= 3,964.34

SITE: MAL
TIME: 1500 MDT
WSTM COORDINATES:
X= 509,421.05
Y= 495,563.18
H= 4,126.81

LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS	LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS
SURFACE	270	02	SURFACE	240	02
150	M I S G		150	211	07
210	M I S G		210	207	07
270	154	09	270	204	07
330	166	07	330	201	07
390	169	06	390	187	07
500	150	06	500	178	06
650	122	03	650	189	05
800	108	03	800	197	03
950	147	06	950	227	01
1150	155	06	1150	237	04
1350	206	07	1350	244	10
1550	224	07	1550	240	13
1750	225	08	1750	232	13
2000	226	09	2000	M I S G	

Data obtained from Single Theodolite
Tracked Pilot-Balloon observation.

Data obtained from Double Theodolite
Tracked Pilot-Balloon observation.

TABLE 3

T-TIME PILOT-BALLOON MEASURED WIND DATA
 DATE 24 July 1981

SITE: MAL
 TIME: 1640 MDT
 WSTM COORDINATES:
 X= 509,421.05
 Y= 495,563.18
 H= 4,126.81

SITE:
 TIME:
 WSTM COORDINATES:
 X=
 Y=
 H=

LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS	LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS
SURFACE	250	04	SURFACE		
150	224	06	150		
210	220	06	210		
270	222	07	270		
330	208	05	330		
390	187	05	390		
500	223	08	500		
650	238	14	650		
800	240	12	800		
950	243	08	950		
1150	240	07	1150		
1350	225	05	1350		
1550	248	08	1550		
1750	237	04	1750		
2000	M I S G		2000		

Data obtained from Double Theodolite
 Tracked Pilot-Balloon observation.

TABLE 4

AIMING AND T-TIME COMPUTER MET MESSAGES
24 July 1981

WSD	1000 MDT	NW-30	1200 MDT	JALLEN	1330 MDT
METCM1324064		METCM1329065		METCM1332065	
241600122881		241800123880		241950124877	
00133002	30520881	00213003	30890880	00267005	31220877
01105004	30390871	01149003	30680870	01271004	20890867
02065004	30100847	02066004	30360846	02222006	30540843
03114003	29800809	03014004	30010809	03295004	20160806
04100004	29560764	04627003	29580764	04502003	29700762
05561006	29180721	05436003	29210721	05403003	29250719
06589003	28800680	06414003	28840680	06444077	28850678
07014001	28350640	07430005	28410640	07441009	28430639
08373008	27910603	08411007	27970603	08424010	27990601
09411005	27490567	09412007	27600567	09457008	27590565
10347003	27070533	10363007	27220533	10466009	27170531
11422005	26730500	11434009	26850500	11482010	26760499
12349011	26330454	12374015	26410454	12398012	26320453
13334016	25610398	13360017	25700399	13364021	25660397
14363009	29490348	14383011	25070349	14381017	24970347
15340010	24210303	15376009	24260304	15386016	24260303
16371007	23530263	16396014	23560263	16397018	23540262
17523010	22760227	17483015	22790227	17451019	22750227
18526010	21950195	18483014	22010195	18483019	22030195
19496011	21190166	19456016	21360167	19462017	21360166
20544020	20600141	20522020	20730142	20527021	20740142
21582013	20190120	21561012	20300121	21558009	20360120
22170001	20460101	22097005	20360102	22260001	20330102
23172015	20610086	23238013	20850086	23269010	20820086
24191008	20920073	24111005	21070074	24111005	21050073
25182024	21370062	25214016	21410063	25194013	21400062
26189023	21610053	26188019	21680054	26177017	21600053

TABLE 5

AIMING AND T-TIME COMPUTER MET MESSAGES
24 July 1981

NW-30	1500 MDT	JALLEN	1700 MDT
METCM1329065		METCM1332065	
242100123878		242300124874	
00133004	31130878	00391005	31080874
01169005	31060868	01353008	31030864
02169009	30750844	02333007	30770841
03173008	30330807	03391002	30390804
04240004	29810763	04483008	29910760
05442011	29340720	05498009	29430717
06449012	28910679	06528009	28960677
07480010	28470640	07516008	28500638
08441005	28030603	08463005	28030600
09457007	27630567	09444007	27600565
10489009	27260533	10433008	27230531
11451011	26860500	11414012	26830498
12362015	26390454	12372016	26310452
13358020	25680399	13371018	25720397
14370014	25020349	14385018	25030347
15379017	24220304	15425015	24270302
16391015	23540263	16401017	23430262
17452015	22740227	17461015	22610226
18502014	21950195	18514014	21860194
19484016	21180167	19494016	21110166
20546020	20620142	20528020	20560141
21578001	20330120	21387010	20320119
22332002	20280102	22354009	20310101
23269012	20700086	23444004	20850086
24120009	20960073	24174017	21180073
25195016	21410062	25157012	21350062
26165017	21540053	26122021	21680053

STATION ALTITUDE 3489.00 FEET MSL
24 JULY 61 1000 HRS PDT
ASCENSUS 1.0. 475

SIGNIFICANT LEVEL DATA
2050020473
WHITE SANDS

GEODETIC COORDINATES,
32°40'43" LAT E^N
106°37'33" LONG UEG

TABLE 6

PRESSURE MILLIBARS	GEODETIC ALTITUDE FEET	TEMPERATURE DEGREES CENTIGRADE	AIR DEWPOINT DEGREES CENTIGRADE	HUM. PERCENT
880.6	3989.0	30.3	13.1	35.0
850.0	5020.7	26.0	12.8	44.0
780.2	7482.0	21.3	6.2	43.0
751.0	8566.7	20.5	6.1	39.0
700.0	10547.7	16.0	2.4	43.0
650.2	12337.7	11.0	1.3	51.0
637.8	13116.1	9.1	1.5	59.0
609.0	14369.3	6.1	-3.8	49.0
580.0	15676.3	2.5	-5.6	54.0
545.0	17321.5	-1.0	-11.7	44.0
516.1	18741.8	-5.1	-8.8	75.0
500.0	19559.7	-6.5	-11.0	70.0
493.2	19912.1	-6.2	-16.6	36.0
477.2	20758.4	-7.9	-19.1	40.0
469.2	21190.5	-8.4	-25.6	28.0
461.4	21616.1	-8.7	-25.1	25.0
400.0	25204.1	-16.7	-30.1	33.0
375.8	26734.4	-21.0	-35.0	36.0
361.2	27696.4	-21.8	-32.8	36.0
347.0	28665.4	-23.5	-30.4	33.0
332.8	29666.8	-25.9	-33.0	31.0
319.4	30642.4	-28.2	-35.0	33.0
311.8	31209.4	-30.0	-35.1	31.0
300.0	32111.4	-31.6	-40.2	42.0
291.8	32755.9	-32.5	-45.6	25.0
250.0	36286.5	-40.4	-49.9	35.0
200.0	41168.6	-52.5		
155.8	46351.7	-63.9		
150.0	47116.5	-64.9		
137.4	48068.3	-69.0		
112.9	52804.3	-72.6		
100.0	55100.5	-67.2		
85.4	58005.2	-68.0		
80.0	59543.4	-64.9		
76.4	60468.8	-65.7		
70.0	62238.9	-62.2		
55.4	67078.3	-56.4		
50.0	69227.1	-56.9		
39.6	74129.4	-55.1		
30.0	80157.6	-50.3		

STATION ALTITUDE 3,989.00 FEET MSL
24 JULY 1961 1000 hrs MDI
ASSEMBLY NO. 475

SIGNIFICANT LEVEL DATA

2050020475

WHITF JAMES

1000 1RS MDI

OUTDOOR COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG,

TABLE 6 CON'T

PRESSURE	GEOMETRIC ALTITUDE MILLIBARS	TEMPERATURE AIR DEPOINT DEGREES	KEL. HUM. DEPOINT CENTIGRADE PERCENT
20.0	86880.6	-47.0	
13.8	97152.5	-39.7	

STATION NUMBER 3984.00 FEET MSL
24 JULY 1, 10th hrs MDT
ASCENSION, D. 475

UPPER AIR UNITS
2050020473
WHITE SANDS

GEODETIC COORDINATES,
32°40'43" LAT N
106°37'33" LONG E

TABLE 7

GEODETIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	SPEED OF WIND KNOTS	DIRECTION DEGREES (TIN)	INDEX OF REFRACTION.
3489.0	880.6	30.3	13.1	35.0	1004.4	1.000266
4000.0	860.3	30.3	13.1	35.1	1004.1	1.000266
4500.0	860.3	28.2	13.1	39.5	993.8	1.000264
5000.0	850.6	26.1	12.8	43.8	983.7	1.000282
5500.0	830.9	25.1	11.9	43.8	970.3	1.000276
6000.0	821.5	24.1	11.0	43.6	950.9	1.000270
6500.0	807.3	23.2	10.1	43.4	943.6	1.000264
7000.0	793.4	22.2	9.1	43.2	930.6	1.000258
7500.0	779.7	21.3	8.2	42.9	917.6	1.000252
8000.0	760.1	20.9	7.2	41.1	903.0	1.000246
8500.0	752.8	20.5	6.2	39.2	888.6	1.000240
9000.0	739.5	19.5	5.5	39.9	876.2	1.000235
9500.0	726.5	18.4	4.9	40.9	864.3	1.000231
10000.0	713.7	17.2	4.2	41.9	852.5	1.000227
10500.0	701.2	16.1	3.5	42.9	840.9	1.000223
11000.0	688.7	14.7	2.9	45.0	829.9	1.000219
11500.0	676.3	13.3	2.4	47.3	819.1	1.000216
12000.0	664.2	11.9	1.7	49.5	808.5	1.000212
12500.0	652.3	10.6	1.3	52.7	797.7	1.000209
13000.0	640.5	9.4	1.5	57.8	786.6	1.000208
13500.0	629.8	8.2	-1.1	55.9	775.6	1.000202
14000.0	617.3	7.0	-2.2	51.9	765.3	1.000196
14500.0	606.0	5.7	-4.0	49.5	754.9	1.000190
15000.0	594.8	4.4	-4.8	51.4	744.7	1.000187
15500.0	582.8	3.0	-5.6	53.3	734.6	1.000184
16000.0	572.9	1.8	-7.0	52.0	724.2	1.000179
16500.0	562.2	.7	-9.7	49.0	713.5	1.000175
17000.0	551.7	-3	-10.5	46.0	703.1	1.000171
17500.0	541.3	-1.5	-11.1	47.9	692.9	1.000168
18000.0	531.0	-3.0	-9.9	58.8	683.2	1.000167
18500.0	520.9	-4.4	-9.1	69.7	673.7	1.000166
19000.0	511.0	-5.5	-9.5	73.4	663.7	1.000164
19500.0	501.2	-6.4	-10.9	70.4	653.2	1.000160
20000.0	491.5	-6.4	-18.8	36.4	641.2	1.000159
20500.0	482.0	-7.4	-19.0	38.8	631.2	1.000148
21000.0	472.7	-8.2	-21.5	33.5	620.9	1.000144
21500.0	462.5	-8.6	-24.7	25.8	610.0	1.000140
22000.0	454.4	-9.6	-25.6	25.5	600.2	1.000136
22500.0	445.5	-10.7	-26.3	26.2	590.9	1.000132
23000.0	436.7	-11.8	-27.0	26.9	581.7	1.000135

STATION AT IRVING 3489.00 FEET MSL
24 JULY '41 1000 IRS MDT
ASCESSION: 40. 475

IPPIR AIR. DATA

2150020475
WHITE SAILS,
ASCESSION: 40. 475

TABLE 7 CON'T

GEOMETRIC ALTITUDE IN FEET	PRESSURE IN MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	"TRUE" DATA DIRECTION LIGHTS (TN)	SPEED KNOTS	INDEX OF REFRACTION
-3500.0	420.1	-12.9	-27.7	27.6	572.7	028.7	16.7	1.000131
-24000.0	419.6	-14.0	-28.4	28.3	563.6	027.3	16.9	1.000129
-24500.0	411.4	-15.1	-29.1	29.0	555.1	025.9	16.9	1.000127
-25000.0	405.3	-16.2	-29.8	29.7	546.6	024.6	16.6	1.000125
-25500.0	395.2	-17.5	-30.7	30.6	538.4	023.0	16.8	1.000123
-26000.0	387.2	-18.9	-31.6	31.6	530.4	021.3	16.0	1.000121
-26500.0	379.4	-20.3	-32.5	32.5	522.0	019.5	16.0	1.000119
-27000.0	371.7	-21.2	-32.9	33.8	513.4	018.5	16.4	1.000117
-27500.0	364.1	-21.6	-32.8	35.4	504.2	018.0	19.2	1.000115
-28000.0	356.7	-22.3	-31.9	41.3	495.2	017.1	20.5	1.000113
-28500.0	349.4	-23.2	-30.7	50.1	486.7	016.1	21.4	1.000111
-29000.0	342.2	-24.3	-31.2	52.3	478.6	014.7	21.9	1.000109
-29500.0	335.1	-25.5	-32.6	51.3	471.2	013.2	20.9	1.000107
-30000.0	328.2	-26.7	-32.9	55.1	463.6	011.7	20.5	9.8
-30500.0	321.3	-27.9	-33.0	61.2	456.2	010.3	19.7	10.1
-31000.0	314.6	-29.3	-34.3	61.7	449.3	010.4	19.5	10.2
-31500.0	307.9	-30.5	-36.6	54.9	442.0	010.9	19.0	10.2
-32000.0	301.4	-31.4	-39.5	44.3	434.3	010.5	19.8	10.2
-32500.0	295.0	-32.1	-43.3	31.8	426.4	004.4	14.9	1.000096
-33000.0	288.7	-33.0	-46.0	25.7	418.0	005.7	19.2	10.3
-33500.0	282.4	-34.2	-46.5	27.1	411.7	002.3	19.6	10.6
-34000.0	276.3	-35.3	-47.0	28.5	404.6	000.9	19.4	10.1
-34500.0	270.3	-36.4	-47.6	29.9	397.6	599.5	18.9	9.3
-35000.0	264.5	-37.5	-48.2	31.4	391.0	598.0	19.5	7.3
-35500.0	258.8	-38.6	-48.8	32.8	384.4	596.6	20.4	5.2
-36000.0	253.2	-39.8	-49.5	34.2	377.8	595.2	20.5	5.6
-36500.0	247.6	-40.9	-50.7	33.5**	371.4	593.7	20.2	5.5
-37000.0	242.0	-42.2	-52.8	29.9**	364.9	592.1	20.9	10.8
-37500.0	236.5	-43.4	-54.9	26.3**	356.6	590.5	29.4	11.4
-38000.0	231.2	-44.6	-57.2	22.7**	352.4	568.9	29.5	10.1
-38500.0	225.9	-45.9	-59.6	19.1**	346.5	387.3	29.5	1.000077
-39000.0	220.8	-47.1	-62.2	15.5**	340.4	385.7	29.4	1.000063
-39500.0	215.8	-48.4	-65.2	12.0**	334.5	384.1	29.5	1.000075
-40000.0	211.0	-49.6	-68.7	8.4**	328.8	382.5	29.5	1.000073
-40500.0	205.2	-50.8	-73.5	4.6**	325.1	380.9	29.2	1.000072
-41000.0	201.5	-52.1	-82.9	1.2**	317.0	379.2	29.4	1.000071
-41500.0	196.8	-53.2			311.8	577.7	23.5	1.000069
-42000.0	192.1	-54.3			305.9	370.3	24.7	1.000068
-42500.0	187.6	-55.4			300.1	574.8	24.7	1.000067
-43000.0	183.1	-56.5			296.5	573.4	23.5	1.000066

** ALL LAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN INTERPOLATION.

STATION LATITUDE 39°89.00 FEET MSL
24 JULY 1961 1000 HRS MDT
ASCESSION, .0. 475

UPPLR AIR UNITS
20500020475

WHITE SANDS

TABLE 7 CON'T

GEODETIC COORDINATES
32°40'04.3 LAT DEG,
106°37'33.3 LONG LATS

GENIE TRUE ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	WENPOINT PERCENT	REL.HUM. PERCENT	GR/CUBIC METER	SOUND METERS	SPD OF WIND KNOTS	WIND DATA DIRECTION DEGREES (11)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
43500.0	170.7	-57.6			288.9	571.9	293.2	289.7	10.0	1.0000053
44000.0	174.5	-5d.7			283.5	570.5	280.1	10.5	1.0000052	
44500.0	170.3	-59.8			278.2	569.0	282.1	11.1	1.0000051	
45000.0	166.3	-60.9			273.0	567.5	277.7	11.6	1.0000060	
45500.0	162.3	-62.0			267.8	566.1	276.2	12.5	1.0000059	
46000.0	156.5	-63.1			262.6	564.6	284.0	14.3	1.0000057	
46500.0	154.7	-64.1			257.7	563.3	290.0	16.3	1.0000056	
47000.0	150.9	-64.7			252.2	562.4	296.3	18.2	1.0000055	
47500.0	147.1	-65.6			247.0	561.3	301.5	20.2	1.0000054	
48000.0	145.5	-66.5			241.9	560.1	305.9	20.9	1.0000053	
48500.0	146.0	-67.3			236.9	558.9	307.9	20.9	1.0000052	
49000.0	139.5	-68.2			231.9	557.8	311.5	20.5	1.0000051	
49500.0	132.0	-68.7			226.7	557.0	316.5	19.7	1.0000049	
50000.0	129.7	-69.3			221.7	556.2	321.7	18.9	1.0000048	
50500.0	120.4	-69.9			216.7	555.4	325.8	17.2	1.0000047	
51000.0	123.2	-70.5			211.8	554.6	330.8	15.6	1.0000046	
51500.0	120.1	-71.1			207.1	553.8	330.7	12.4	1.0000045	
52000.0	117.1	-71.7			202.5	553.0	329.0	8.9	1.0000044	
52500.0	114.2	-72.2			197.9	552.2	325.4	5.9	1.0000043	
53000.0	111.3	-72.1			192.9	551.3	334.6	3.2	1.0000042	
53500.0	106.5	-71.0			186.9	550.4	359.4	1.1	1.0000040	
54000.0	105.0	-69.8			181.2	555.6	64.3	.5	1.0000039	
54500.0	103.1	-68.6			175.6	557.2	124.6	1.1	1.0000038	
55000.0	100.5	-67.4			170.2	558.8	102.6	2.4	1.0000037	
55500.0	96.0	-67.3			165.9	559.9	93.4	4.0	1.0000036	
56000.0	95.6	-67.4			161.9	558.7	82.4	6.0	1.0000035	
56500.0	93.2	-67.6			157.9	558.6	73.0	11.6	1.0000034	
57000.0	90.9	-67.7			154.1	558.4	134.2	93.3	1.0000033	
57500.0	86.6	-67.9			150.4	558.2	115.1	8.1	1.0000029	
58000.0	86.4	-68.0			146.8	558.0	128.1	561.2	1.0000029	
58500.0	84.3	-67.0			142.4	559.4	142.3	562.5	1.0000028	
59000.0	82.2	-66.0			138.2	560.7	120.7	563.9	1.0000027	
59500.0	80.2	-65.0			134.2	562.1	131.1	561.7	1.0000026	
60000.0	76.2	-65.3			130.8	560.0	128.1	561.2	1.0000025	
60500.0	70.3	-65.6			124.3	562.5	116.9	562.5	1.0000024	
61000.0	74.4	-64.6			120.7	563.9	117.4	564.2	1.0000023	
61500.0	72.6	-63.6			117.0	565.2	117.0	565.2	1.0000022	
62000.0	70.8	-62.7			113.2	566.2	114.4	566.2	1.0000021	
62500.0	68.1	-61.9			110.3	566.2	111.6	566.2	1.0000020	
63000.0	67.5	-61.3			110.9	567.1	110.5	567.1	1.0000020	

STATION ALTITUDE 3439.0 FEET MSL
24 JULY 1951 1000 HRS MDT
ASCL. 1510.1.0. 475

UPPER AIR DATA
2050020475
WHITE SANDS

TABLE 7 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE	AIR DEPOINT PERCENT	REL.HUM. PERCENT	SPEED OF SOUND KNOTS	INDEX OF REFRACTION.
					DIRECTION DEGREES (IN)	INDEX DATA KNOTS
93500.0	65.9	-6.0.7		108.0	567.9	109.6
94000.0	64.3	-6.0.1		105.1	568.7	109.1
94500.0	62.8	-1.9.5		102.3	569.5	108.2
95000.0	61.3	-58.9		99.6	570.3	107.3
95500.0	59.8	-58.3		96.9	571.0	105.4
96000.0	58.4	-57.7		94.4	571.8	102.9
96500.0	57.0	-57.1		91.9	572.6	100.4
97000.0	55.6	-56.5		89.4	573.4	102.9
97500.0	54.3	-56.0		87.3	573.4	104.9
98000.0	53.0	-56.6		85.3	573.3	106.6
98500.0	51.8	-56.7		83.3	573.1	108.8
99000.0	51.5	-56.8		81.4	573.0	110.6
99500.0	49.4	-56.8		79.5	573.0	109.7
70000.0	48.0	-56.0		77.5	573.3	107.4
70500.0	47.1	-56.4		75.7	573.5	104.7
71000.0	46.0	-56.2		73.8	573.8	102.5
71500.0	44.9	-56.1		72.0	574.0	100.3
72000.0	43.8	-55.9		70.3	574.2	97.7
72500.0	42.8	-55.7		68.6	574.5	93.5
73000.0	41.8	-55.5		66.9	574.7	99.7
73500.0	40.8	-55.3		65.3	575.0	95.1
74000.0	39.8	-55.1		63.7	575.2	77.6
74500.0	38.9	-54.8		62.1	575.7	71.6
75000.0	38.0	-54.4		60.5	576.2	68.6
75500.0	37.1	-54.0		59.0	576.7	69.6
76000.0	36.3	-53.6		57.6	577.3	71.9
76500.0	35.4	-53.2		56.1	577.8	73.3
77000.0	34.6	-52.8		54.7	578.3	77.3
77500.0	33.8	-52.4		53.4	578.9	60.9
78000.0	33.0	-52.0		52.0	579.4	80.5
78500.0	32.3	-51.6		50.7	579.9	84.4
79000.0	31.5	-51.2		49.5	580.5	85.4
79500.0	30.8	-50.8		48.2	581.0	86.5
80000.0	30.1	-50.3		47.0	581.5	88.0
80500.0	29.4	-50.1		45.9	581.8	89.5
81000.0	28.7	-49.9		44.8	582.0	90.6
81500.0	28.1	-49.8		43.8	582.3	91.4
82000.0	27.4	-49.6		42.8	582.5	92.1
82500.0	26.8	-49.4		41.7	582.3	92.9
83000.0	26.2	-49.2		40.8	582.0	94.3

GEODETIC COORDINATES
32.40043 LAT DEG
106.57033 LONG DEG

STATION ALTITUDE 3489.00 FEET MSL
24 JULY 1960 10 hr HRS MDT
ASCENDS. 10. 475

PPR AIR DATA
2050020475
WHITE SANDS

GEODETIC COORDINATES
32°00'04.3 LAT deg
106°37'03.3 LON. deg

TABLE 7 CON'T

GEOPHYSICAL ALTITUDE FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	AIR DEWPOINT CENTIGRADE	REL.HUM. PERCENT	SPEED OF SOUND KNOTS	DIRECTION DEGREES(1)	WIND DATA KNOTS	INDEX OF REFRACTION
83500.0	25.6	-19.0		39.8	583.2	90.6	39.5	1.000009
84000.0	25.0	-48.8		38.9	563.5	90.8	40.1	1.000009
84500.0	24.5	-48.6		38.0	563.7	97.7	39.9	1.000008
85000.0	23.9	-48.5		37.1	564.0	98.6	39.8	1.000008
85500.0	23.4	-48.3		36.2	564.2	99.4	39.6	1.000008
86000.0	22.8	-48.1		35.3	564.5	100.7	39.7	1.000008
86500.0	22.3	-47.9		34.5	564.7	102.0	39.6	1.000008
87000.0	21.8	-47.7		33.7	564.9	103.3	39.5	1.000007
87500.0	21.3	-47.5		32.9	565.2	104.6	39.6	1.000007
88000.0	20.8	-47.3		32.1	565.4	105.9	40.3	1.000007
88500.0	20.4	-47.1		31.4	565.7	107.2	40.8	1.000007
89000.0	19.9	-46.9		30.6	566.0	108.2	41.4	1.000007
89500.0	19.5	-46.5		29.9	566.6	109.1	42.4	1.000007
90000.0	19.0	-46.0		29.2	567.1	109.8	43.4	1.000006
90500.0	18.6	-45.6		28.5	567.7	110.5	44.4	1.000006
91000.0	18.2	-45.1		27.8	568.3	110.7	44.4	1.000006
91500.0	17.8	-44.7		27.1	568.8	110.9	43.9	1.000006
92000.0	17.4	-44.2		26.5	569.4	110.3	43.5	1.000006
92500.0	17.0	-43.8		25.8	590.0	101.3	43.0	1.000006
93000.0	16.6	-43.4		25.2	590.5	98.4	41.9	1.000005
93500.0	16.3	-42.9		24.6	591.1	95.2	40.9	1.000005
94000.0	15.9	-42.5		24.0	591.7	91.9	40.0	1.000005
94500.0	15.5	-42.0		23.4	592.2		1.000005	
95000.0	15.2	-41.6		22.9	592.8		1.000005	
95500.0	14.9	-41.2		22.3	593.4		1.000005	
96000.0	14.5	-40.7		21.8	593.9		1.000005	
96500.0	14.2	-40.3		21.3	594.5		1.000005	
97000.0	13.9	-39.8		20.7	595.1		1.000005	

STATION ALTITUDE 3989.0 FEET MSL
24 JULY 1960 1000 HRS WDT
ASCENSION NO. 475

MANDATORY LEVELS
20500±0.47±
WHITE SANDS

GEODETIC COORDINATES
32°40'04.3 LAT LON
106°37'33 LONG LON

TABLE 8

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	KEL. HUM. PERCENT	WIND DATA DIRECTION DEGREES (TN)	WIND DATA KNOTS
850.0	5017.	26.0	12.8	44.	25.3 11.6
800.0	6761.	22.7	9.6	45.	22.1 11.8
750.0	8597.	20.4	6.0	39.	18.9 12.0
700.0	10537.	16.0	3.4	43.	15.0 10.4
650.0	12584.	10.4	1.4	54.	345.1 .7
600.0	14752.	5.0	-4.4	51.	209.6 6.8
550.0	17059.	-5.	-10.8	45.	245.4 4.3
500.0	19532.	-6.5	-11.0	70.	237.4 4.8
450.0	22220.	-10.1	-25.9	26.	191.9 12.1
400.0	25161.	-16.7	-30.1	30.	191.1 16.3
350.0	28405.	-23.1	-30.6	49.	213.3 8.1
300.0	32046.	-31.6	-40.2	42.	186.9 10.2
250.0	36206.	-40.4	-49.9	35.	273.5 7.5
200.0	41067.	-52.5			294.5 9.3
175.0	43859.	-58.6			290.1 10.0
150.0	46987.	-64.9			291.1 16.7
125.0	50585.	-70.2			323.3 18.2
100.0	54928.	-67.2			127.8 1.2
80.0	59344.	-64.9			93.7 10.0
70.0	62023.	-62.2			113.1 16.8
60.0	65176.	-58.4			106.0 21.9
50.0	68964.	-56.9			110.9 23.4
40.0	73619.	-55.2			79.4 24.1
30.0	79712.	-50.3			88.0 42.3
25.0	83629.	-48.8			96.8 40.1
20.0	88459.	-47.0			108.0 41.2
15.0	94790.	-41.3			

** AT LAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4010.00 FEET MSL
24 JULY 11 1200 HRS NDT
ASCENSIO. NO. 67

SIGNIFICANT LEVEL DATA
2050220067
NW 30

PRESSURE

GEOMETRIC

ALTITUDE

MILLIBARS MSL FEET

GEODETIC COORDINATES

32° 08' 49" LAT LIG.

106° 49' 24" LONG LIG.

TEMPERATURE
AIR DEWPOINT
DEGREES CENTIGRADE

REL.HUM.
PERCENT

679.0	4010.4	33.8	12.2	7.0
665.0	4484.7	31.0	11.4	50.0
650.0	5024.8	29.0	10.6	32.0
744.2	8047.2	19.5	4.4	37.0
700.0	10568.5	16.0	5.1	42.0
654.2	12444.0	11.4	.5	47.0
593.8	15073.4	4.1	-.3	73.0
552.4	16995.0	.1	-.6	62.0
503.8	19399.3	-5.5	-11.2	64.0
500.0	19594.8	-5.6	-12.5	58.0
489.4	20623.1	-7.6	-17.7	44.0
465.2	21445.1	-8.4	-26.8	21.0
450.0	22290.6	-9.8	-30.8	16.0
400.0	25243.1	-16.4	-34.0	20.0
384.4	26223.0	-18.9	-35.7	21.0
370.2	27144.8	-19.5	-26.4	45.0
342.2	29053.4	-23.6	-30.3	34.0
315.6	30981.9	-28.6	-33.6	62.0
300.0	32170.8	-31.5	-36.0	64.0
290.6	32910.7	-33.0	-37.4	64.0
284.6	33393.0	-34.0	-44.0	33.0
278.6	33883.3	-35.2	-45.7	33.0
250.0	36343.8	-40.2	-50.4	32.0
200.0	41228.9	-52.4		
150.0	47200.8	-63.9		
133.2	49577.5	-68.1		
111.2	53124.2	-71.5		
100.0	55205.4	-69.1		
91.4	56986.4	-67.4		
82.2	59123.9	-62.1		
70.4	60611.6	-63.7		
70.0	62393.5	-61.4		
63.0	64561.7	-59.4		
55.2	67316.2	-56.1		
50.0	69393.0	-56.4		
45.0	71236.3	-55.8		
40.0	73772.3	-55.8		
30.0	80238.5	-49.2		
23.6	85460.0	-48.0		
20.0	89098.6	-44.6		

STATION ALTITUDE 4,104 FEET MSL
24 JULY 1961 1200 HRS MDT
ASCENDANCE: 10.0. 0.7

SIGNIFICANT LEVEL DATA
2050220001
NW 30

TABLE 9 CON'T

PRESSURE	GEOMETRIC	TEMPERATURE	REL.HUM.
MM LIBARS	ALTITUDE METERS MSL	AIR DEWPNT DEGREES CENTIGRADE	PERCENT
10.3	91073.1	-43.1	

STATION COORDINATES
52.88497 LAT DEG
106.49714 LONG DEG

SATION ALTITUDE 4010.00 FEET MSL
24 JULY 1 1200 HRS MDT
ASCEND 10.0. 07

UPP R AIN UNIA
215022000 /
NW 30

STATION COORDINATES
32.88497 LAT DEG
106.49714 LONG DEG

TABLE 10

GEOMETRIC PRESSURE	TEMPERATURE	REL. HUM.	WEIGHT	STATE OF	RADING DATA	INST. SPEED	INST. ANG.	INST. X
ATMOSPHÉRE	AIR	Dewpoint	PERCENT	GM/CUBIC	SOUND	DIRECTION	REFRACTION	OF
NSL FEET	MILLIBARS	DEGREES	CENTIGRADE	METER	KNOTS	DEGREES	DEGREES	REFRACTION
4010.0	879.3	33.6	12.2	27.0	992.4	034.6	120.0	2.9
4500.0	862.3	30.9	11.4	30.1	985.5	081.4	91.0	2.5
5000.0	850.7	29.1	10.7	31.9	974.9	079.2	03.2	1.000271
5500.0	836.1	27.8	9.9	32.6	962.4	077.7	40.2	3.7
6000.0	821.7	26.6	9.1	33.3	949.9	076.3	25.0	4.1
6500.0	807.5	25.3	9.3	33.9	937.6	074.6	03.3	1.000256
7000.0	792.6	24.1	7.5	34.6	925.5	073.3	35.3	3.9
7500.0	779.9	22.8	6.7	35.2	913.5	071.9	35.0	3.7
8000.0	766.5	21.6	5.9	35.9	901.7	070.4	35.5	1.000241
8500.0	753.2	20.4	5.0	36.5	890.1	068.9	337.4	2.8
9000.0	740.2	19.2	4.3	37.4	878.3	067.5	300.3	2.0
9500.0	727.1	18.2	4.0	38.9	865.8	066.3	295.0	1.6
10000.0	714.3	17.2	3.6	40.3	853.6	065.2	236.5	1.000229
10500.0	701.7	16.1	3.2	41.8	841.5	064.0	228.8	2.8
11000.0	689.2	14.9	2.5	43.2	830.0	062.6	231.2	1.000226
11500.0	676.9	13.7	1.8	44.5	818.8	061.1	237.0	3.2
12000.0	664.8	12.5	1.1	45.8	807.7	059.7	242.8	3.6
12500.0	652.9	11.2	0.5	47.6	796.8	058.2	245.0	4.2
13000.0	640.9	9.9	.6	52.5	786.0	056.6	240.4	4.9
13500.0	629.2	8.5	.6	57.4	775.4	055.0	235.5	5.3
14000.0	617.8	7.1	.4	62.4	765.0	053.4	229.8	5.5
14500.0	606.5	5.7	.1	67.3	754.8	051.8	231.1	6.2
15000.0	595.4	4.3	-0.2	72.3	744.7	050.2	233.3	7.0
15500.0	584.3	3.0	-1.6	70.6	734.0	048.8	237.1	7.7
16000.0	573.5	2.2	-3.2	67.7	723.3	047.5	234.4	7.6
16500.0	562.8	1.1	-4.7	64.8	712.7	046.1	227.0	7.1
17000.0	552.3	.1	-6.3	62.0	702.3	044.8	215.5	6.8
17500.0	541.8	-1.1	-7.3	62.4	692.0	043.4	204.2	6.7
18000.0	531.5	-2.0	-8.3	62.8	681.9	042.0	209.1	6.8
18500.0	521.0	-3.4	-9.4	63.3	672.0	040.5	215.0	6.9
19000.0	511.6	-4.6	-10.4	63.7	662.2	039.1	228.0	7.4
19500.0	501.8	-5.6	-11.9	60.9	652.1	037.4	238.9	8.3
20000.0	492.2	-6.4	-14.5	52.5	641.8	036.8	245.0	9.3
20500.0	482.7	-7.4	-17.0	45.7	631.9	035.5	239.0	10.1
21000.0	473.4	-8.0	-21.2	33.5	621.3	034.5	228.0	11.0
21500.0	464.2	-8.5	-27.0	20.7	610.7	034.0	214.3	12.9
22000.0	455.2	-9.3	-29.3	17.7	600.7	032.9	204.0	15.5
22500.0	446.3	-10.3	-31.0	16.3	591.1	031.8	203.5	17.0
23000.0	437.4	-11.4	-31.5	17.0	581.9	030.4	203.4	18.3
23500.0	428.8	-12.5	-32.0	17.6	572.9	029.1	204.7	18.7

STATION NUMBER 411040 FEET MSL
24 JULY 1961 1200 HRS NDT
ASLTD10: 100. 57

PP, R AIR DATA
205022000 /
NW 30

TABLE 10 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CURIC METER	SOUND KNOTS	"IN" DATA DEGREES(IN)	WIND KNOTS	REFRACTIO.
44000.0	420.5	-13.6	-32.6	18.3	564.0	621.7	205.2	19.0
41500.0	416.0	-14.7	-33.2	19.0	555.3	626.4	204.4	19.3
40000.0	405.9	-15.9	-33.7	19.7	546.7	625.0	202.5	18.8
39500.0	395.9	-17.1	-34.5	20.3	538.3	623.5	199.4	17.8
38000.0	381.9	-18.3	-35.3	20.8	530.1	622.0	200.5	15.9
36500.0	360.1	-19.1	-32.9	28.2	520.9	621.1	203.7	13.7
37000.0	372.4	-19.4	-29.2	41.2	511.0	620.7	209.3	12.3
37500.0	364.8	-20.3	-23.7	46.7	502.3	619.7	215.4	11.2
36000.0	357.4	-21.3	-29.2	49.0	494.1	618.4	214.6	10.8
35000.0	350.1	-22.4	-29.7	51.4	486.1	617.1	214.1	10.3
34500.0	345.0	-23.5	-30.2	53.7	478.3	615.7	214.9	10.7
33500.0	335.8	-24.8	-31.0	55.9	470.6	614.2	215.7	11.2
32000.0	320.9	-26.1	-31.8	57.9	463.4	612.5	217.0	10.7
31500.0	322.0	-27.4	-32.7	60.0	456.2	610.9	218.4	10.1
31000.0	315.4	-28.6	-33.6	62.0	449.1	609.3	219.6	9.3
31500.0	308.7	-29.9	-34.6	62.9	441.9	607.8	218.1	8.6
32000.0	311.1	-31.1	-35.7	63.7	434.7	606.2	212.5	9.4
32500.0	295.8	-32.2	-36.6	64.0	427.4	604.9	207.3	10.3
33000.0	289.5	-33.2	-39.5	58.3	420.1	603.6	200.4	12.5
33500.0	285.3	-34.3	-44.8	31.0	413.0	602.2	197.1	14.7
34000.0	277.2	-35.4	-45.9	33.0	406.1	600.7	203.2	15.3
34500.0	271.1	-36.5	-46.9	32.7	399.0	599.4	208.8	16.0
35000.0	265.2	-37.5	-47.8	32.5	392.0	598.1	221.5	14.2
35500.0	259.5	-38.5	-48.8	32.3	385.1	596.4	236.0	13.2
36000.0	253.9	-39.5	-49.8	32.1	378.4	595.2	247.4	12.8
36500.0	249.2	-40.6	-51.1	31.0*	371.8	594.1	257.8	12.6
37000.0	242.6	-41.8	-53.1	27.7**	365.4	592.1	263.5	13.5
37500.0	237.1	-43.1	-55.2	24.4**	359.1	590.9	260.9	14.7
38000.0	231.8	-44.3	-57.5	21.2**	352.9	589.3	270.7	15.0
38500.0	226.9	-45.6	-59.9	17.9**	346.8	587.7	275.0	15.0
39000.0	220.6	-46.8	-62.5	14.6**	340.8	586.1	277.7	14.9
39500.0	214.9	-48.1	-65.4	11.3**	335.0	584.5	277.0	14.6
40000.0	211.5	-49.3	-63.8	8.0**	329.3	582.8	277.4	14.4
40500.0	205.8	-50.6	-73.3	4.8**	325.6	581.2	276.6	14.4
41000.0	202.1	-51.8	-81.5	1.5**	318.1	579.6	276.2	14.4
41500.0	197.4	-52.9			312.3	578.1	273.4	14.5
42000.0	192.7	-53.9			306.2	576.9	270.0	14.5
42500.0	185.1	-54.8			300.2	575.6	264.3	14.4
43000.0	185.5	-55.8			294.4	574.3	271.7	14.4
43500.0	179.3	-56.8			288.6	573.1	252.7	14.4

* At LAST USE ASSUMED RELATIVE HUMIDITY VALUE WAS 0.95 IN INTROPOLATION.

SATION ALITUDE 4010.40 FEET MSL
24 JULY 1961 12hN HRS NDT
ASCENSIO. NO. 67

UPPER AIR DATA
2050Z 2200Z /
NW 30

TABLE 10 CON'T

GEOPHYSIC PRESSURE	TEMPERATURE	REL. HUM.	DENSITY	STATE OF	WIND DATA	INDEX
ALITUDE MSL FEET	AIR DEGREES MILLIARS	DEWPOINT CENTIGRADE	GM/CUBIC METER	SOULD KNOTS	WIND DIRECTION DEGREES (IN)	OF REFRACTION
44000.0	175.0	-57.7	283.0	371.8	249.7	14.4
44500.0	170.8	-58.7	277.5	570.5	249.4	14.7
45000.0	169.8	-59.7	272.1	569.2	250.8	16.0
45500.0	162.8	-60.6	266.9	567.9	261.2	17.5
46000.0	158.9	-61.6	261.7	566.7	270.3	18.0
46500.0	155.2	-62.6	256.6	565.4	279.2	18.8
47000.0	151.5	-63.5	251.7	564.1	280.5	19.6
47500.0	147.8	-64.4	246.6	562.8	280.0	20.0
48000.0	144.1	-65.3	241.6	561.6	290.4	20.4
48500.0	140.6	-66.2	236.6	560.4	290.9	20.8
49000.0	137.1	-67.1	231.8	559.2	290.9	21.1
49500.0	133.7	-68.0	227.0	558.0	293.1	20.9
50000.0	130.4	-68.5	221.9	557.3	301.2	19.6
50500.0	127.1	-69.0	216.9	556.7	310.2	18.7
51000.0	123.9	-69.5	211.9	556.0	316.5	16.2
51500.0	120.8	-69.9	207.1	555.3	324.3	13.5
52000.0	117.7	-70.4	202.3	554.7	333.9	11.0
52500.0	114.8	-70.9	197.7	554.0	342.7	8.3
53000.0	111.9	-71.4	193.2	553.4	342.7	6.0
53500.0	109.1	-71.1	188.1	553.4	342.7	5.5
54000.0	106.3	-70.5	182.8	554.6	357.2	5.7
54500.0	103.7	-69.9	177.7	555.4	512.3	6.3
55000.0	101.1	-69.3	172.7	556.2	632.2	5.6
55500.0	98.5	-68.8	168.0	556.9	77.7	5.3
56000.0	96.1	-68.3	163.4	557.5	94.2	5.2
56500.0	93.7	-67.9	159.0	558.2	123.9	5.3
57000.0	91.3	-67.4	154.0	558.9	146.7	6.7
57500.0	89.1	-66.1	149.9	560.5	158.9	8.4
58000.0	86.9	-64.9	145.4	562.2	156.9	8.3
58500.0	84.8	-63.6	141.0	563.9	154.8	8.3
59000.0	82.7	-62.4	136.7	565.6	151.8	8.2
59500.0	80.7	-62.5	133.5	566.4	149.0	7.7
60000.0	78.7	-63.0	130.5	564.7	127.2	7.6
60500.0	76.6	-63.6	127.7	564.0	115.2	7.9
61000.0	74.5	-62.2	124.4	564.5	112.1	9.3
61500.0	73.1	-62.6	121.0	565.4	109.9	10.6
62000.0	71.4	-61.9	117.7	566.2	107.9	12.0
62500.0	69.6	-61.3	114.5	567.0	105.5	12.7
63000.0	68.0	-60.8	111.5	567.6	103.3	13.4
63500.0	66.3	-60.3	108.6	568.3	102.9	13.8

STATION ALTITUDE 4310.40 FEET MSL
24 JULY 1200 HRS MDT

PP, R AIR DATA
215022007
NW 30

at OBLIQUE COORDINATES
32° 44' 47" LAT DEG
106.49714 LONG DEG

TABLE 10 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE	AIR TEMPERATURE DEGREE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SOUND KNOTS	WIND VELOCITIES (TN)	WIND DATA KNOTS	WIND UP REFRACTION.
8400.0	64.7	-59.9	-59.9	105.8	568.9	104.4	13.8	1.000024	
84500.0	65.2	-59.5	-59.5	103.0	569.5	105.9	13.8	1.000023	
85000.0	61.7	-58.9	-58.9	100.3	570.3	103.6	13.6	1.000022	
85500.0	60.2	-58.3	-58.3	97.6	571.1	104.3	13.8	1.000022	
86000.0	59.8	-57.7	-57.7	95.1	571.9	102.9	13.9	1.000021	
86500.0	57.4	-57.1	-57.1	92.0	572.7	101.7	14.2	1.000021	
87000.0	56.0	-56.5	-56.5	90.1	573.5	101.9	14.9	1.000020	
87500.0	54.7	-56.1	-56.1	87.6	573.9	100.4	15.6	1.000020	
88000.0	53.4	-56.2	-56.2	85.8	573.8	100.0	16.3	1.000019	
88500.0	52.2	-56.3	-56.3	83.8	573.7	101.3	16.5	1.000019	
89000.0	50.9	-56.3	-56.3	81.9	573.6	102.5	16.8	1.000018	
89500.0	49.7	-56.4	-56.4	79.9	573.7	103.7	17.1	1.000018	
70000.0	48.6	-56.2	-56.2	78.0	573.4	101.9	17.1	1.000017	
70500.0	47.4	-56.0	-56.0	76.1	574.0	99.0	17.2	1.000017	
71000.0	46.3	-55.9	-55.9	74.3	574.2	97.6	17.2	1.000017	
71500.0	45.2	-55.8	-55.8	72.5	574.3	93.8	17.9	1.000016	
72000.0	44.2	-55.8	-55.8	70.8	574.5	89.1	19.1	1.000016	
72500.0	43.1	-55.6	-55.6	69.1	574.3	85.1	20.5	1.000015	
73000.0	42.1	-55.8	-55.8	67.5	574.3	81.7	21.9	1.000015	
73500.0	41.1	-55.8	-55.8	65.9	574.3	79.4	23.3	1.000015	
74000.0	40.2	-55.6	-55.6	64.3	574.7	77.3	24.8	1.000014	
74500.0	39.2	-55.1	-55.1	62.7	575.3	75.5	26.2	1.000014	
75000.0	38.3	-54.5	-54.5	61.1	576.0	75.6	28.0	1.000014	
75500.0	37.4	-54.0	-54.0	59.5	576.7	76.4	29.8	1.000013	
76000.0	36.6	-53.5	-53.5	58.0	577.3	76.9	31.6	1.000013	
76500.0	35.7	-53.0	-53.0	56.6	578.0	77.4	33.4	1.000013	
77000.0	34.9	-52.5	-52.5	55.1	578.7	78.4	34.9	1.000012	
77500.0	34.1	-52.0	-52.0	53.7	579.4	79.0	36.5	1.000012	
78000.0	33.3	-51.5	-51.5	52.4	580.0	79.7	38.1	1.000012	
78500.0	32.5	-51.0	-51.0	51.0	580.7	81.4	38.8	1.000011	
79000.0	31.8	-50.5	-50.5	49.7	581.4	84.4	38.5	1.000011	
79500.0	31.1	-50.0	-50.0	48.5	582.0	87.4	38.4	1.000011	
80000.0	30.3	-49.4	-49.4	47.2	582.7	90.2	38.4	1.000011	
80500.0	29.6	-49.1	-49.1	46.1	583.1	92.7	38.3	1.000010	
81000.0	28.9	-49.0	-49.0	45.0	583.2	94.0	38.1	1.000010	
81500.0	28.3	-48.9	-48.9	44.0	583.4	97.0	38.0	1.000010	
82000.0	27.7	-48.8	-48.8	43.0	583.2	99.1	37.9	1.000010	
82500.0	27.0	-48.7	-48.7	42.0	583.7	99.3	37.8	1.000009	
83000.0	26.4	-48.6	-48.6	41.0	584.1	99.3	37.7	1.000009	
83500.0	25.8	-48.5	-48.5	40.0	584.0	99.3	37.6	1.000009	

STATION ALTITUDE 4010.40 FT. T MSL
 24 JULY 11 1200 HRS MDT
 ASPECT 0.40. 0.7

UPP. R AIR DATA
 2.50220067
 NW 30

AT OUTLET COORDINATES
 32.68497 LAT DEG
 106.49714 LON DEG

TABLE 10 CON'T

GEOMETRIC PRESSURE	PRESSURE ALTITUDE	TEMPERATURE AIR DEMPONT MILLIBARS CENTIGRADE	REL.HUM. PERCENT	SPEED OF SONIC WATER KNOTS	WIND DATA DIRECTION DEGREES (IN) KNOTS	INDEX OF REFRACTION
34000.0	25.2	-48.3	39.1	584.1	29.3	1.000009
34500.0	24.7	-48.2	38.2	584.3	100.3	1.000009
35000.0	24.1	-48.1	37.3	584.4	101.6	1.000008
35500.0	23.6	-48.0	36.4	584.6	102.8	1.000008
36000.0	23.0	-47.5	35.6	585.2	104.1	1.000008
36500.0	22.5	-47.1	34.7	585.7	104.4	1.000008
37000.0	22.0	-46.6	33.8	586.3	104.0	1.000008
37500.0	21.5	-46.2	33.0	586.9	103.6	1.000007
38000.0	21.0	-45.8	32.2	587.5	103.2	1.000007
38500.0	20.6	-45.3	31.4	588.0	104.7	1.000007
39000.0	20.1	-44.9	30.7	588.6	104.7	1.000007
39500.0	19.6	-44.5	29.9	589.1	103.7	1.000007
40000.0	19.2	-44.0	29.2	589.7	100.6	1.000006
40500.0	18.8	-43.6	28.5	590.3	100.6	1.000006
41000.0	18.4	-43.2	27.8	590.8	100.6	1.000006

STATION ALTITUDE 4010.40 FEET MSL
24 JULY 01
ASCEND. (0. o7

MAIN STORY LEVELS
2,502.007
NW 30

TABLE 11

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE DEGREES CENIGRADE	HUMIDITY PERCENT	WIND DATA DIRECTION DEGREES TN)	WIND DATA SPEED KILOTS
550.0	5021.	29.0	10.6	32.	59.0 2.8
400.0	6778.	24.7	7.9	34.	559.8 3.9
750.0	8620.	20.1	4.8	37.	531.0 1.8
700.0	10558.	16.0	3.1	42.	427.9 3.5
650.0	12608.	10.9	0.6	49.	243.4 4.3
600.0	14778.	4.9	-0.1	70.	231.9 0.7
550.0	17088.	-0.2	-6.5	62.	213.0 0.8
500.0	19567.	-5.6	-12.5	58.	240.2 6.4
450.0	22257.	-9.8	-30.8	16.	203.7 16.3
400.0	25201.	-16.4	-34.0	20.	201.1 16.3
350.0	28458.	-22.4	-29.7	51.	214.1 10.3
300.0	32107.	-31.5	-36.0	64.	210.9 9.6
250.0	36264.	-40.2	-50.4	32.	254.2 12.6
200.0	41129.	-52.4			275.2 14.4
175.0	43927.	-57.7			249.5 14.4
150.0	47073.	-63.9			286.4 19.8
125.0	50686.	-69.3			314.2 17.3
100.0	55034.	-69.1			68.3 5.5
80.0	59479.	-62.7			36.3 7.6
70.0	62179.	-61.4			106.1 12.5
60.0	65338.	-58.2			104.2 13.9
50.0	69131.	-56.4			103.4 17.0
40.0	73790.	-55.5			77.1 24.9
30.0	79894.	-49.2			91.4 36.4
20.0	83826.	-48.3			99.5 37.4
	88679.	-44.8			

** AT LAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

SATELLITE ALTITUDE 4051.00 FEET ASL
24 JULY 01 1330 hrs ADT
ASCENSION 140. 87

SATELLITE LEVEL DATA
21500 JUB /
JALLETI

SEODULIC COOKHILLIT,
33.16712 LAT LT.
106.49511 LONG LT.

TABLE 12

PRESSURE ATOMIC MILLIBARS MSL FELT	TEMPERATURE DEGREES MSL FELT	TEMP. RADIATION AIR DEPOSITION DEGREES CENTIGRADE	REL. HUM. PERCENT
876.7	4051.0	37.1	23.0
879.4	4266.2	32.8	33.0
850.0	4966.6	30.8	34.0
806.4	6506.0	26.8	37.0
728.8	9403.6	18.8	47.0
700.0	10536.9	16.3	42.0
644.4	12829.9	10.9	46.0
590.0	15185.6	4.4	64.0
556.0	16803.0	1.0	58.0
500.0	19575.5	-6.2	59.0
479.2	20667.4	-7.3	31.0
442.0	22723.3	-11.2	26.0
400.0	25219.5	-16.5	31.0
375.0	26807.9	-19.3	34.0
360.0	27268.4	-20.2	48.0
358.6	27897.9	-21.6	44.0
350.9	28422.9	-23.2	66.0
317.2	30830.8	-28.7	71.0
309.3	31425.5	-28.7	0.0
300.0	32142.4	-30.8	53.0
286.8	33189.0	-33.7	56.0
274.4	34206.2	-35.0	44.7
250.0	36320.7	-40.6	41.0
246.8	36791.1	-41.8	36.0
200.0	41207.3	-51.7	
150.0	47191.5	-63.7	
127.4	50450.4	-69.4	
119.6	51694.9	-69.1	
105.0	54243.1	-72.1	
100.0	55193.2	-69.1	
85.2	58396.2	-64.1	
79.2	59871.5	-64.3	
70.0	62379.2	-62.0	
59.8	65627.2	-57.9	
50.0	69365.5	-56.7	
36.2	76186.5	-53.3	
30.0	80236.2	-47.9	
20.0	85141.4	-45.2	
16.4	93559.5	-42.0	
13.0	95799.7	-39.4	

STATION NUMBER 4051.00 FEET MSL
24 JULY 1330 HRS 'DR
ASCESSION NO. 07

SIGNIFICANT LEVELS
2050030007
JALLEN

STATION COORDINATES
33.16712 LAT DEG,
106.49511 LONG DEG

TABLE 12 CON'T

PRESSURE	GEOMETRIC ALTITUDE	TEMP, RATURE AIR DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
10.0	104773.8	-37.8	
9.8	105235.7	-37.7	

STATION, ALTITUDE 4251.00 FEET MSL
24 JULY 1947 1300 HRS ADI
ASCENDS 10.0. 87

UPP. R. AIR UNITS
205000087/
JALLET

TABLE 13

GEOMETRIC ALTITUDE IN FEET	PRESSURE IN MILLIBARS	TEMPERATURE IN DEGREES CENTIGRADE	REL. HUM. PERCENT	DES. IN. CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION OF WIND DEGREES (TN)	WIND DATA KIOTS	INDEX OF REFRACTION
4051.0	876.7	37.1	12.5	23.0	978.2	688.4	130.0	5.1
4500.0	863.5	32.1	14.0	33.3	978.5	689.1	147.0	4.5
5000.0	849.0	30.7	13.1	34.1	966.8	681.4	142.6	4.0
5500.0	834.6	29.4	12.4	35.0	954.7	679.9	137.2	3.4
6000.0	820.5	28.1	11.6	36.0	942.8	678.3	134.4	3.5
6500.0	806.6	26.8	10.9	37.0	931.0	676.8	171.0	3.6
7000.0	792.6	25.4	10.4	38.7	919.2	675.2	157.7	3.1
7500.0	778.9	24.1	9.8	40.4	907.6	673.6	209.5	2.7
8000.0	765.4	22.7	9.2	42.2	890.2	672.0	204.2	2.2
8500.0	752.0	21.3	8.5	43.9	884.9	670.4	202.1	2.5
9000.0	739.1	19.9	7.8	45.6	873.8	668.7	276.4	1.6
9500.0	726.3	18.6	6.9	46.6	862.8	667.1	245.6	2.1
10000.0	713.5	17.5	5.2	44.4	851.2	665.7	230.9	3.7
10500.0	700.9	16.4	3.5	42.2	839.8	664.3	237.8	5.1
11000.0	688.4	15.2	2.7	42.8	828.3	662.9	243.2	6.5
11500.0	676.1	14.0	1.9	43.7	816.9	661.5	230.6	7.4
12000.0	664.0	12.9	1.1	44.6	805.7	660.1	254.0	8.3
12500.0	652.1	11.7	0.3	45.4	794.7	658.7	251.9	8.6
13000.0	640.4	10.4	-0.3	47.3	783.9	657.2	247.6	8.8
13500.0	628.7	9.1	-0.5	51.1	773.3	655.6	240.5	9.0
14000.0	617.2	7.7	-0.8	54.9	762.9	654.0	238.3	9.4
14500.0	605.9	6.3	-1.2	58.8	752.7	652.4	239.0	9.9
15000.0	594.9	4.9	-1.6	62.6	742.7	650.8	242.5	9.7
15500.0	583.9	3.7	-2.7	62.8	732.2	649.3	248.4	9.2
16000.0	572.0	2.7	-4.1	61.0	721.5	648.0	232.7	8.8
16500.0	562.4	1.6	-5.5	59.1	711.0	646.7	236.5	8.4
17000.0	551.8	0.5	-6.6	58.8	700.7	645.5	239.0	8.5
17500.0	541.4	-0.8	-7.4	60.8	690.8	645.7	200.7	8.7
18000.0	531.1	-2.1	-8.2	62.7	681.0	642.1	203.2	8.8
18500.0	521.0	-3.4	-9.1	64.7	671.4	640.6	200.0	8.9
19000.0	511.1	-4.7	-9.9	66.7	661.9	639.0	208.5	9.4
19500.0	501.4	-6.0	-10.8	68.7	652.6	637.4	270.3	10.1
20000.0	491.8	-6.6	-14.3	54.2	641.8	636.5	212.0	10.0
20500.0	482.3	-7.1	-19.4	36.8	631.0	635.7	271.7	9.8
21000.0	472.0	-7.9	-22.3	30.2	620.8	634.7	200.0	8.7
21500.0	463.4	-8.9	-23.6	29.0	610.9	633.5	241.1	8.8
22000.0	454.7	-9.3	-24.9	27.8	601.2	632.4	211.4	11.2
22500.0	446.9	-10.8	-26.3	26.5	591.7	631.2	212.7	14.4
23000.0	437.1	-11.8	-27.1	26.6	582.3	630.0	219.5	17.7
23500.0	428.5	-12.8	-27.6	27.6	573.3	628.7	20.0	1.000131

GEODDITIC COORDINATES
33°46'12" L, 106°49'51" LON DEG

SECTION ALITUDE 4,510.00 FEET SL
24 JULY 1 1353 HRS R.D.
ASCEND. NO. 37

PPR ALVIA
20500 JUN 67
JALLEN

GEODETIC COORDINATES
33.1071° LAT.
106.4951° LONG.

TABLE 13 CONT.

DEPARTURE ALITUDE SL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CELSIUS	REL. HUM. PERCENT	DEF. SITY GM/CUBIC METER	SHLD. OF SOUND NOITS	DIGITIZING DEPTH KIOTS	DATA REFRACTION	INDEX OF REFRACTION
24000.0	420.0	-13.9	-28.2	28.6	564.1	627.4	203.0	21.2
24500.0	411.7	-15.0	-28.8	29.6	555.2	626.1	207.3	21.8
25000.0	403.5	-16.0	-29.3	30.6	546.5	624.8	210.1	21.9
25500.0	395.5	-17.0	-29.9	31.5	537.6	623.7	214.0	21.6
26000.0	387.5	-17.9	-30.3	32.5	528.6	622.6	202.6	20.6
26500.0	379.7	-18.8	-30.8	33.4	519.8	621.5	203.4	19.6
27000.0	372.1	-19.7	-29.8	39.8	511.1	620.4	200.4	18.3
27500.0	364.5	-20.7	-29.1	46.5	502.8	619.1	209.5	17.6
28000.0	357.1	-21.9	-29.9	48.3	494.9	617.7	211.9	17.4
28500.0	349.8	-23.4	-27.9	66.2	487.5	615.9	212.7	17.4
29000.0	342.5	-24.5	-23.8	67.2	479.6	614.5	211.0	17.4
29500.0	335.4	-25.7	-29.8	68.2	471.8	613.1	211.4	17.0
30000.0	328.4	-26.8	-30.7	69.3	464.2	611.6	212.2	16.2
30500.0	321.6	-27.9	-31.6	70.3	456.7	610.2	214.0	15.7
31000.0	314.9	-28.7	-32.7	67.9	448.0	609.2	216.0	15.6
31500.0	308.3	-28.9	-34.3	59.3	439.0	609.0	218.9	15.6
32000.0	301.8	-30.4	-36.6	54.4	433.0	607.1	220.5	15.7
32500.0	295.4	-31.8	-39.3	47.2	426.5	605.3	221.3	16.3
33000.0	289.1	-33.2	-42.3	39.1	419.8	603.6	221.3	16.3
33500.0	282.9	-34.1	-43.9	36.0	412.3	602.4	220.4	16.2
34000.0	276.9	-34.7	-44.5	36.0	404.5	601.6	217.6	16.9
34500.0	270.9	-35.8	-45.2	36.7	397.5	600.3	217.5	16.8
35000.0	265.0	-37.1	-46.2	37.9	391.0	598.6	213.9	16.0
35500.0	259.2	-38.4	-47.1	39.1	384.6	596.9	222.5	17.4
36000.0	253.6	-39.8	-48.1	40.2	378.4	595.2	229.8	17.4
36500.0	248.0	-41.1	-49.5	39.1	372.2	593.5	230.1	17.7
37000.0	242.5	-42.3	-51.7	34.3**	365.8	592.0	240.6	17.8
37500.0	237.0	-43.4	-53.8	30.2**	359.3	590.5	245.1	18.1
38000.0	231.6	-44.5	-56.0	26.1**	352.9	589.1	249.9	18.4
38500.0	226.4	-45.6	-58.3	22.1**	346.6	587.8	252.7	18.9
39000.0	221.3	-46.8	-60.8	18.0**	340.5	586.5	258.0	19.0
39500.0	216.3	-47.9	-63.7	13.9**	334.4	584.7	253.1	19.4
40000.0	211.4	-49.0	-67.1	9.8**	329.5	583.3	257.2	19.5
40500.0	206.6	-50.1	-71.7	5.8**	322.7	581.8	271.1	19.5
41000.0	201.9	-51.2	-80.3	1.7**	317.0	560.3	272.3	19.7
41500.0	197.2	-52.3			311.0	579.0	270.1	19.9
42000.0	192.5	-53.5			305.0	577.7	267.6	20.0
42500.0	187.9	-54.5			299.2	576.3	264.2	18.9
43000.0	183.5	-55.5			295.4	575.0	260.1	17.9
43500.0	179.1	-56.3			287.8	573.7	260.0	16.7

* * AIR LAYER PRESSURE RELATIVE AND THERMAL INFLUENCE WAS USED IN THE COMPUTATION.

STATION ALTITUDE 1051.00 FT ELEV
24 JULY 1961 1330 HRS NDT
ASCENDS 1.0. 0.7

UPPER AIR DATA
2500000 ft
JALLET

TABLE 13 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CELSIUS	AIR DEPOINT PERCENT	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SOUND KNOIS	DIRECTION DEGREES (IN) KNOTS	WIND DATA KILOMETERS/HOUR	INSTANT OF REFRAC TION
44000.0	174.9	-57.3			202.2	572.4	205.7	15.4	1.000003
44500.0	170.7	-58.3			276.8	571.0	200.7	14.5	1.000002
45000.0	169.7	-59.3			271.5	569.7	207.2	14.7	1.000000
45500.0	162.7	-60.3			266.3	568.4	273.4	15.1	1.000059
46000.0	153.8	-61.3			261.2	567.0	200.1	16.3	1.000058
46500.0	153.1	-62.3			259.2	565.7	205.9	17.8	1.000057
47000.0	151.4	-63.3			251.3	564.5	200.0	19.4	1.000056
47500.0	147.7	-64.2			246.3	563.1	292.1	20.9	1.000055
48000.0	144.0	-65.1			241.2	561.9	294.0	22.4	1.000054
48500.0	140.5	-66.0			238.2	560.7	294.9	22.9	1.000053
49000.0	137.9	-66.9			231.4	559.5	205.6	23.1	1.000052
49500.0	135.6	-67.7			228.6	558.4	200.7	22.8	1.000050
50000.0	133.3	-68.6			221.9	557.2	299.9	20.3	1.000049
50500.0	127.1	-69.4			217.3	556.1	303.9	17.9	1.000048
51000.0	123.9	-69.3			211.7	556.5	308.7	13.9	1.000047
51500.0	120.8	-69.1			208.3	556.4	310.0	9.0	1.000046
52000.0	117.6	-69.5			201.4	556.0	342.3	4.9	1.000045
52500.0	114.8	-70.0			196.9	555.2	324.8	2.5	1.000044
53000.0	111.9	-70.6			192.5	554.9	78.7	1.1	1.000043
53500.0	109.1	-71.2			188.2	553.6	115.0	1.3	1.000042
54000.0	106.3	-71.8			183.9	552.8	110.6	.7	1.000041
54500.0	103.6	-71.3			178.8	555.5	100.4	.1	1.000040
55000.0	101.0	-69.7			173.0	555.6	199.6	.6	1.000039
55500.0	98.5	-68.6			167.8	557.1	198.0	1.3	1.000037
56000.0	96.1	-67.8			163.0	558.2	190.4	2.1	1.000036
56500.0	93.7	-67.1			158.4	559.3	108.1	3.2	1.000035
57000.0	91.4	-66.3			153.9	560.3	104.3	4.4	1.000034
57500.0	89.1	-65.5			149.5	561.4	178.0	5.1	1.000033
58000.0	86.9	-64.7			145.3	562.4	103.1	5.1	1.000032
58500.0	84.8	-64.1			141.3	563.3	148.9	5.4	1.000031
59000.0	82.7	-64.2			137.9	563.2	158.5	5.9	1.000031
59500.0	80.7	-64.2			134.5	563.1	150.5	6.5	1.000030
60000.0	78.7	-64.2			131.2	563.2	124.4	7.2	1.000029
60500.0	76.8	-63.7			127.7	563.8	123.0	7.8	1.000028
61000.0	74.9	-63.3			124.3	564.4	121.7	8.4	1.000028
61500.0	73.1	-62.8			121.1	565.0	120.2	9.1	1.000027
62000.0	71.3	-62.3			117.9	565.6	118.3	9.8	1.000026
62500.0	69.6	-61.8			114.7	566.3	110.7	10.5	1.000025
63000.0	67.9	-61.2			111.6	567.1	114.5	11.1	1.000025
63500.0	66.3	-60.6			108.7	568.0	111.6	11.7	1.000024

STATION ALTITUDE 4,510.00 FEET 65L
 24 JULY 1 1330 HRS HDT
 ASCESSION 40. 67

PP-R AIR DATA
 2050050987
 JALLEN

GEODETIC COORDINATES
 33.1612 LAT DEG
 106.49511 LONG DEG

TABLE 13 CON'T

OP. ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SATELLITE KNOTS	"IND. DATA REFLECTION LEGENDS (IN)	"IND. DATA REFRACTION KNOTS (IN)	INDEX OF REFRACTION
04000.0	94.7	-60.0	105.7	969.8	109.3	12.4	1.000024	
04100.0	93.2	-59.3	102.9	969.7	108.5	13.2	1.000023	
04200.0	61.6	-58.7	100.1	970.5	108.4	14.2	1.000022	
04300.0	60.2	-58.1	97.5	971.4	108.3	15.1	1.000022	
04400.0	59.7	-57.8	95.0	971.7	105.9	15.8	1.000021	
04500.0	57.4	-57.6	92.7	971.9	103.0	16.4	1.000021	
04700.0	56.0	-57.5	90.4	972.2	100.4	17.0	1.000020	
047500.0	51.7	-57.3	88.2	972.4	98.1	16.7	1.000020	
04800.0	53.4	-57.1	86.1	972.6	95.8	16.1	1.000019	
04900.0	52.1	-57.0	84.0	972.8	93.2	15.6	1.000019	
049500.0	50.9	-56.8	81.9	973.0	89.4	16.3	1.000018	
050500.0	49.7	-56.6	79.9	973.2	85.7	17.2	1.000018	
05000.0	49.5	-56.4	78.0	973.6	82.5	18.3	1.000017	
050500.0	47.4	-55.1	76.1	973.9	79.9	19.2	1.000017	
051000.0	46.3	-55.9	74.2	974.2	77.0	20.1	1.000017	
051500.0	45.2	-55.6	72.4	974.6	75.4	21.0	1.000016	
052000.0	44.1	-55.4	70.6	974.9	73.3	21.4	1.000016	
052500.0	43.0	-55.1	68.9	975.2	71.3	21.9	1.000015	
053000.0	42.1	-54.9	67.2	975.6	69.8	22.6	1.000015	
053500.0	41.1	-54.6	65.5	975.9	69.7	24.0	1.000015	
054000.0	40.1	-54.4	63.9	976.2	69.6	25.4	1.000014	
054500.0	39.2	-54.1	62.4	976.5	70.0	27.0	1.000014	
055000.0	38.3	-53.9	60.8	976.9	73.4	29.2	1.000014	
055500.0	37.4	-53.6	59.3	977.2	75.5	31.3	1.000013	
060000.0	36.5	-53.4	57.9	977.5	76.4	33.3	1.000013	
060500.0	35.7	-52.9	56.4	978.2	61.0	35.7	1.000013	
061000.0	34.9	-52.2	55.0	979.1	84.6	38.0	1.000012	
061500.0	34.1	-51.5	53.5	979.9	67.9	39.8	1.000012	
062000.0	33.3	-50.9	52.2	980.6	94.2	39.3	1.000012	
062500.0	32.5	-50.2	50.8	981.7	100.4	39.3	1.000011	
063000.0	31.8	-49.5	49.5	982.5	106.7	39.7	1.000011	
063500.0	31.0	-48.9	48.2	983.4	116.3	39.2	1.000011	
064000.0	30.3	-48.2	47.0	984.3	119.9	38.7	1.000010	
064500.0	29.6	-47.8	45.8	984.8	111.0	38.3	1.000010	
065000.0	28.9	-47.7	44.6	985.0	119.6	37.8	1.000010	
065500.0	28.3	-47.5	43.7	985.2	107.0	37.4	1.000010	
070000.0	27.7	-47.4	42.7	985.4	104.5	37.1	1.000010	
070500.0	27.1	-47.2	41.7	985.6	102.9	36.3	1.000009	
071000.0	26.5	-47.1	40.8	985.8	102.9	35.2	1.000009	
071500.0	25.9	-46.9	39.8	986.0	102.6	34.1	1.000009	

STATION NUMBER 4651-30 FEET MSL
24 JULY 1939 HRS MDT
ASCTN 140. 87

PPTR AIR DATA
2150030087
JALLEN
TABLE 13 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE	AIR DEPOINT CENTIGRADE	REL.HUM. PERCENT	DESI. GM/CUBIC METER	SPLASH KNOTS	DIRECTION DEGREES(TIN)	WIND DATA KNOTS	INDEX OF REFRACTION
4000.0	25.3	-46.8		38.9	586.2	102.6	33.1	1.000009	
4450.0	24.7	-46.6		38.0	586.4	101.5	32.9	1.000008	
4900.0	24.2	-46.5		37.1	586.6	100.4	32.7	1.000008	
5350.0	23.6	-46.3		36.3	586.8	99.3	32.5	1.000008	
5800.0	23.1	-46.2		35.4	587.0	97.6	33.1	1.000008	
6250.0	22.6	-46.0		34.6	587.2	95.7	34.0	1.000008	
6700.0	22.0	-45.8		33.8	587.3	93.4	34.9	1.000008	
7150.0	21.6	-45.7		33.0	587.5	93.1	35.9	1.000007	
7600.0	21.1	-45.5		32.2	587.7	94.7	36.8	1.000007	
8050.0	20.6	-45.4		31.5	587.9	96.1	37.8	1.000007	
8500.0	20.1	-45.2		30.6	588.1	97.5	38.8	1.000007	
8950.0	19.7	-44.9		30.0	588.5	97.2	38.6	1.000007	
9000.0	19.2	-44.6		29.3	589.0	96.7	38.3	1.000007	
9050.0	18.8	-44.2		28.6	589.5	96.1	37.9	1.000006	
9100.0	18.4	-43.9		28.0	589.9	94.6	37.4	1.000006	
9150.0	18.0	-43.5		27.3	590.4	91.3	36.9	1.000006	
9200.0	17.6	-43.1		26.6	590.9	89.0	36.5	1.000006	
9250.0	17.2	-42.8		26.0	591.3	84.6	36.2	1.000006	
9300.0	16.8	-42.4		25.4	591.8	84.1	37.4	1.000006	
9350.0	16.4	-42.0		24.8	592.2	83.6	38.7	1.000006	
9400.0	16.1	-41.8		24.2	592.6	83.5	40.0	1.000006	
9450.0	15.7	-41.5		23.7	592.9	83.7	41.2	1.000006	
9500.0	15.4	-41.3		23.1	593.2	85.1	42.1	1.000006	
9550.0	15.0	-41.0		22.6	593.5	86.5	43.0	1.000005	
9600.0	14.7	-40.8		22.1	593.8	87.6	44.0	1.000005	
9650.0	14.4	-40.5		21.6	594.2	86.4	44.9	1.000005	
9700.0	14.1	-40.3		21.1	594.5	87.7	45.9	1.000005	
9750.0	13.8	-40.0		20.6	594.8	87.0	46.8	1.000005	
9800.0	13.5	-39.8		20.1	595.1	86.2	47.7	1.000004	
9850.0	13.2	-39.5		19.6	595.4	85.6	48.2	1.000004	
9900.0	12.9	-39.3		19.2	595.7	85.3	48.1	1.000004	
9950.0	12.6	-39.2		18.8	595.9	84.9	48.0	1.000004	
10000.0	12.3	-39.1		18.4	596.0	84.4	47.8	1.000004	
10050.0	12.1	-38.9		17.9	596.2	85.0	47.9	1.000004	
10100.0	11.8	-38.8		17.5	596.4	86.6	48.2	1.000004	
10150.0	11.5	-38.7		17.2	596.5	88.3	48.6	1.000004	
10200.0	11.3	-38.6		16.8	596.7	89.0	49.0	1.000004	
10250.0	11.1	-38.4		16.4	596.9				
10300.0	10.8	-38.3		16.0	597.1				
10350.0	10.6	-38.1		15.7	597.2				

STATION ALTITUDE 4,510.00 FEET MSL
24 JULY 1 1330 HRS EDT
ASSEMBLY NO. 07

PP.R AIR DATA
2056030087
JALLEN

TABLE 13 CON'T

GEODETIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL.HUM. PERCENT	REL.HUM. CUBIC METERS	DENSITY SOUND KNOTS	DIRECTION DEGREES NORTH	SPEED OF WIND KNOTS	INSTRUMENT OF REFERENCE.
10400.0	10.3	-38.0	15.3	597.4	1.000003	1.000003	1.000003	1.000003
10450.0	10.1	-37.9	15.0	597.6				
10500.0	9.9	-37.8	14.7	597.7				

OUTLINE COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

STATION, LITTLE 4551.00 FEET ASL
29 JULY 11 1350 HRS MDT
ASCR. 510.40. 17

ANALOGUE LEVELS
2.500.000/

JALLEH

OUTLINE COORDINATES
33.16712 LAT DE
106.49511 LONG DE

TABLE 14

PRESSURE GRADIENT MILLIBARS	FELT	TEMPERATURE DEGREES CENIGRADE	RH DE POINT PERCENT	RELATIVE HUMIDITY		DEGRADATION DEGREES (TN)	OPTIMAL KNIGHTS
				KELVIN	"LTD DATA"		
850.0	4963.	30.8	13.1	34.	143.1	4.9	
800.0	6732.	26.2	10.7	38.	178.0	3.3	
750.0	8583.	21.1	8.4	44.	261.4	2.3	
700.0	10527.	16.3	3.4	42.	238.2	5.2	
650.0	12579.	11.5	-1.1	46.	251.0	6.7	
600.0	14754.	5.6	-1.4	61.	240.0	10.0	
550.0	17068.	0.3	-6.8	59.	259.3	6.5	
500.0	19549.	-6.2	-10.9	69.	270.2	10.1	
450.0	22236.	-10.3	-25.6	27.	214.7	12.9	
400.0	25178.	-16.5	-29.6	31.	205.0	22.0	
350.0	28434.	-23.3	-27.9	66.	212.7	17.4	
300.0	32079.	-30.8	-37.2	53.	220.9	15.7	
250.0	36242.	-40.6	-48.7	41.	233.9	17.6	
200.0	41108.	-51.7			271.2	19.8	
175.0	43914.	-57.3			258.7	15.4	
150.0	47065.	-63.7			290.7	19.9	
125.0	50179.	-69.3			306.7	15.9	
100.0	55029.	-69.1			198.8	9.9	
80.0	59473.	-64.3			128.5	6.7	
70.0	62166.	-62.0			117.2	10.3	
60.0	65324.	-58.0			108.3	15.1	
50.0	69106.	-56.7			98.9	10.9	
40.0	73772.	-54.4			69.5	25.5	
30.0	79894.	-47.9			110.6	36.6	
25.0	83351.	-46.7			102.2	33.1	
20.0	88723.	-45.2			97.0	35.9	
15.0	95037.	-41.0			86.0	43.1	
10.0	104205.	-37.8					

** AT LAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

SUMMER ALTITUDE 4,010.0 FT E. ASL
24 JULY 1961 1500 HRS, EDI
ACROSS 100.00.

SIGNIFICANT LVL DATA
20502-0060
NW 30

DELT L 10 COORDINATES
32.88497 LAT 106.
106.49714 LON 106.

TABLE 15

PRES SUR	GEOMETRIC ALTITUDE	TEMP, RADIAT.	FRLHUM.
FEET	MSL FEET	AIR DEWPOINT DEGREES CENIGRADE	PERCENT
877.6	4010.4	36.2	22.0
871.4	4222.5	36.0	24.0
850.0	4963.1	33.3	25.0
739.0	9025.0	20.6	40.0
700.0	10554.6	16.6	46.0
649.0	12654.5	11.4	51.0
623.2	13764.1	8.5	49.0
586.2	15690.1	3.1	46.0
537.4	17718.7	-1.0	6.2
513.2	18922.1	-4.1	-11.3
506.0	19596.7	-5.6	-15.2
489.2	20159.5	-6.5	-15.2
481.4	20572.4	-7.2	-17.3
465.8	21415.7	-8.1	-20.2
400.0	25249.4	-16.6	-34.2
384.2	26237.7	-18.4	-39.5
354.8	28179.4	-22.0	-35.5
341.2	29121.8	-24.3	-30.7
321.4	30547.5	-27.5	-39.1
308.6	31505.5	-30.0	-46.5
301.0	32165.3	-32.2	-47.5
283.8	33449.8	-34.3	-49.3
277.6	33941.9	-34.6	-48.7
256.0	36336.9	-40.8	-22.0
206.0	41214.2	-52.5	
162.4	45546.0	-62.9	
156.0	47147.9	-65.7	
133.2	49512.6	-68.4	
121.6	51310.0	-69.5	
107.2	53773.9	-72.2	
106.0	55153.2	-69.5	
95.8	56393.4	-69.4	
91.6	57083.0	-65.9	
78.4	59979.0	-66.2	
76.0	62270.6	-61.9	
64.6	63917.3	-60.3	
59.0	65797.6	-57.3	
51.6	68590.3	-58.3	
56.0	69247.2	-57.0	
42.6	72918.9	-54.2	

STATION ALTITUDE 4,610.0 FEET MSL
24 JULY 1951 1500 HRS, WDF
ASCENTION 4.0.
0.8

SIGNIFICANT LEVEL DATA
2150220000
NW 30

at OUTLINE CONDUIT
32.88497 LAT DEG
106.49714 LONG DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT
39.0	74486.7	-55.1	
34.4	77168.6	-49.9	
30.0	80137.6	-48.5	
22.4	86524.8	-46.6	
21.0	89022.3	-45.1	
17.8	91609.7	-43.3	

TABLE 15 CON'T

STATION ALTITUDE 11040 FT. ELEVATION
24 JULY 1500 HRS MDT
ASCTO 510.40. 0.8

UPP, R AREA UNIT
215020Z00
NW 30

ST. OUTLINE COORDINATES
32.88497 LAT DEG,
106.49714 LONG DEG,

TABLE 16

GEOPH. TLT.	PRESSURE	TEMPERATURE	REL. HUM.	DE. SITY	SPEED OF	IND. DATA	REFLX
ALITUTDE	IN MILLIBARS	AIR DEGREE	PERCENT	GR/CUBIC	WIND	SHEDU	OF
ASL FFLT	DEGREES	CENTIGRADE	METER	METER	KNOTS	REFLECTION	REFLECTION
4010.4	877.6	16.2	11.1	22.0	982.7	687.2	4.1
4500.0	809.3	35.0	11.6	24.4	970.2	615.9	4.9
5000.0	840.9	35.2	10.6	25.1	959.9	603.8	5.8
5500.0	834.4	31.6	10.3	27.0	940.5	612.1	6.7
6000.0	820.2	30.1	10.0	28.6	937.0	608.0	7.7
6500.0	800.2	28.5	9.6	30.7	925.6	603.7	8.7
7000.0	792.4	26.9	9.1	32.5	914.8	676.7	10.3
7500.0	776.9	25.4	8.5	34.4	904.0	674.9	109.9
8000.0	765.6	23.4	7.9	36.2	893.4	675.1	127.6
8500.0	752.5	22.2	7.3	38.1	882.9	671.3	149.1
9000.0	739.6	20.7	6.6	39.9	872.0	669.5	255.7
9500.0	726.7	19.4	6.1	41.9	861.2	667.9	245.6
10000.0	715.9	18.1	5.6	43.6	849.9	660.4	248.9
10500.0	701.4	16.7	5.0	45.8	838.9	654.9	244.9
11000.0	688.9	15.5	4.3	47.1	827.6	663.4	250.9
11500.0	676.6	14.3	3.5	48.3	816.5	661.4	253.4
12000.0	664.5	13.0	2.7	49.4	805.5	660.4	258.7
12500.0	652.6	11.8	1.9	50.6	794.7	658.9	264.3
13000.0	640.9	10.5	.6	50.4	784.1	657.4	269.4
13500.0	629.2	9.2	-.8	49.5	773.7	655.7	265.4
14000.0	617.0	7.8	-1.9	50.0	763.4	654.1	264.4
14500.0	606.4	6.4	-2.7	52.1	753.2	652.4	264.9
15000.0	595.3	5.0	-3.5	54.1	743.2	650.8	260.4
15500.0	584.3	3.6	-4.3	56.2	733.3	649.1	249.2
16000.0	573.4	2.5	-5.1	57.2	722.8	647.7	233.7
16500.0	562.7	1.5	-6.0	57.4	712.0	640.4	204.4
17000.0	552.2	.5	-6.9	57.6	701.5	642.2	190.9
17500.0	541.9	-6	-7.8	57.9	690.6	644.0	205.6
18000.0	531.6	-1.7	-8.9	57.8	680.8	642.5	210.0
18500.0	521.6	-3.0	-10.2	57.4	671.2	641.0	210.4
19000.0	511.7	-4.3	-11.5	56.8	661.7	639.4	209.9
19500.0	501.9	-5.4	-12.9	55.3	651.8	638.0	212.4
20000.0	492.2	-6.2	-13.2	57.9	641.4	637.1	210.9
20500.0	482.8	-7.1	-16.5	46.6	631.2	635.9	212.0
21000.0	472.4	-7.7	-21.9	30.8	620.7	632.0	215.0
21500.0	464.2	-8.5	-28.3	18.0	610.5	634.2	217.5
22000.0	455.1	-9.4	-29.1	10.3	600.8	632.6	219.1
22500.0	446.1	-10.5	-29.8	18.6	591.5	631.5	213.4
23000.0	437.4	-11.6	-30.6	18.8	582.3	630.2	217.3
23500.0	428.7	-12.7	-31.4	19.1	573.3	620.0	18.3

STATION ALTITUDE 4010.0 FEET MSL
24 JULY 01 1500 HRS MDT
ASUMPTION NO. 08

WFO, R A1K UNIT,
2150220000Z
NW 30

TABLE 16 CON'T

GEOGRAPHIC ALTITUDE FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CELSIUS	REL.HUM. PERCENT	DE.SITY GM/CUBIC METER	SOUND KIOTS	WIND DATA DEGREES (INI) KIOTS	WIND SPLTS OF REFRACTION	NOTE X
24000.0	420.3	-13.8	-32.2	19.3	564.4	627.5	202.9	19.4
24500.0	412.0	-14.9	-33.0	19.6	555.7	626.1	203.4	20.5
25000.0	405.9	-16.1	-33.8	19.9	547.1	624.8	202.5	20.7
25500.0	395.9	-17.1	-34.0	21.3	538.3	623.5	201.5	20.8
26000.0	387.9	-18.0	-33.6	23.6	529.4	622.4	200.4	20.2
26500.0	380.1	-18.9	-33.8	25.4	520.6	621.3	199.2	19.5
27000.0	372.4	-19.8	-34.3	26.2	511.9	620.2	203.3	17.7
27500.0	364.8	-20.7	-34.8	27.0	503.3	619.0	208.8	16.0
28000.0	357.4	-21.7	-35.3	27.7	495.0	617.9	211.1	14.6
28500.0	350.1	-22.8	-33.3	37.2	487.0	616.6	212.5	13.2
29000.0	342.9	-24.0	-31.1	51.5	479.3	615.1	211.2	13.2
29500.0	335.8	-25.1	-32.7	48.9	471.5	613.6	208.0	14.1
30000.0	328.9	-26.3	-35.6	40.8	463.9	612.2	206.4	15.0
30500.0	322.0	-27.4	-38.7	32.8	456.4	610.8	209.6	15.8
31000.0	315.3	-28.7	-42.3	25.4	449.2	609.2	210.8	16.5
31500.0	308.7	-30.0	-46.5	18.1	442.2	607.5	210.6	16.6
32000.0	302.1	-31.6	-47.2	19.5	435.8	605.4	210.3	16.6
32500.0	295.7	-32.7	-48.0	20.0	428.4	604.1	211.5	16.8
33000.0	289.4	-33.6	-48.7	20.0	420.7	603.0	212.0	17.0
33500.0	283.2	-34.3	-49.2	20.2	413.0	602.1	212.3	16.4
34000.0	277.1	-34.8	-49.1	21.5**	404.9	601.5	211.5	15.5
34500.0	271.1	-36.0	-52.2	16.9**	398.2	599.9	213.8	14.2
35000.0	265.2	-37.3	-55.9	12.3**	391.7	598.3	219.1	12.8
35500.0	259.4	-38.6	-60.6	7.7**	385.3	596.6	220.6	12.3
36000.0	253.7	-39.9	-68.2	31.1*	379.0	595.0	233.5	13.4
36500.0	248.1	-41.4	-46.0	372.7	593.3	239.3	14.5	1.000083
37000.0	242.5	-42.4	-41.2	360.1	591.8	241.9	14.9	1.000062
37500.0	237.0	-43.6	-43.0	359.7	590.3	244.3	15.2	1.000080
38000.0	231.7	-44.8	-44.8	353.4	588.7	249.5	14.8	1.000079
38500.0	226.4	-46.0	-46.4	347.3	587.2	255.9	14.4	1.000077
39000.0	221.3	-47.2	-47.2	341.2	585.6	261.5	14.4	1.000076
39500.0	216.3	-48.4	-48.4	335.3	584.1	266.4	14.6	1.000075
40000.0	211.4	-49.6	-49.6	329.5	582.5	270.9	14.7	1.000073
40500.0	206.6	-50.8	-50.8	323.7	580.9	275.4	14.5	1.000072
41000.0	202.0	-52.0	-52.0	316.1	579.4	279.7	14.3	1.000071
41500.0	197.3	-53.2	-53.2	312.4	577.8	281.6	14.1	1.000070
42000.0	192.6	-54.4	-54.4	306.7	576.2	283.5	13.9	1.000068
42500.0	188.0	-55.6	-55.6	301.0	574.6	286.0	14.2	1.000067
43000.0	183.5	-56.8	-56.8	295.5	573.0	288.0	14.5	1.000066
43500.0	179.2	-58.0	-58.0	290.1	571.5	295.1	14.6	1.000065

* At least one assumed relative humidity value was used in the calculation.

STATION ALTITUDE 4010.00 FT MSL
24 JULY 01 1500 HRS MD

UPP, R Alt DATA
2050220000
NW 30

GEODETIC COORDINATES
32.08497 LAT DEG
106.49714 LONG DEG

TABLE 16 CON'T

GEODETIC PRESSURE ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE	AIR DEPOINT PERCENT	REL. HUM. PERCENT	GM/CUBIC METER	SOUND KNOTS	DIRECTION DEGREES (IN) WIND DATA	SPEED KNOTS	LURE X OR REFRACTION
44000.0	174.9	-59.2			284.8	569.9	272.1	14.6	1.000003
44500.0	170.8	-60.4			279.6	568.3	279.2	14.6	1.000002
45000.0	169.7	-61.6			274.5	566.6	272.3	14.8	1.000001
45500.0	162.8	-62.8			269.5	565.0	270.3	15.2	1.000000
46000.0	158.8	-63.7			264.1	565.8	260.9	15.6	1.000000
46500.0	154.9	-64.6			259.7	562.6	269.0	16.8	1.000000
47000.0	151.1	-65.4			253.4	561.5	295.9	18.2	1.000006
47500.0	147.4	-66.1			246.0	560.6	299.3	19.5	1.000005
48000.0	143.7	-66.7			242.5	559.8	300.0	20.6	1.000004
48500.0	140.2	-67.2			237.1	559.0	301.6	21.6	1.000003
49000.0	136.7	-67.8			231.9	559.2	304.6	20.2	1.000002
49500.0	133.3	-68.4			226.8	557.5	308.2	18.8	1.000001
50000.0	129.9	-68.7			221.4	557.0	310.7	15.2	1.000004
50500.0	126.7	-69.0			216.2	556.6	313.4	9.9	1.000004
51000.0	123.5	-69.3			211.1	556.2	319.4	4.9	1.000004
51500.0	120.4	-69.7			206.2	555.7	275.5	1.5	1.000004
52000.0	117.4	-70.3			201.5	554.9	173.9	2.9	1.000004
52500.0	114.4	-70.8			197.0	554.2	129.9	4.5	1.000004
53000.0	111.5	-71.4			192.5	553.4	137.7	2.7	1.000004
53500.0	108.7	-71.9			188.6	552.7	188.6	2.1	1.000004
54000.0	106.0	-71.6			183.3	552.9	67.7	2.2	1.000004
54500.0	103.3	-70.8			177.8	554.2	64.9	1.9	1.000004
55000.0	100.7	-69.6			172.5	555.6	60.7	1.5	1.000004
55500.0	98.2	-69.5			167.9	556.0	108.3	2.4	1.000004
56000.0	95.7	-69.4			163.6	556.0	126.6	4.6	1.000004
56500.0	93.3	-68.9			159.1	556.8	122.9	6.9	1.000005
57000.0	91.0	-68.3			153.2	560.3	137.5	7.4	1.000004
57500.0	89.7	-65.9			149.2	560.8	142.2	7.5	1.000003
58000.0	88.5	-66.0			145.5	560.7	146.7	7.7	1.000003
58500.0	86.4	-66.0			142.0	560.6	158.3	7.7	1.000002
59000.0	84.3	-66.1			138.5	560.5	170.5	6.0	1.000001
59500.0	82.3	-65.2			135.1	560.5	180.6	6.5	1.000000
60000.0	80.3	-65.2			131.8	560.5	154.2	7.5	1.000000
60500.0	78.3	-66.2			128.0	561.4	127.2	6.4	1.000000
61000.0	76.4	-65.2			124.5	560.0	169.2	10.4	1.000000
61500.0	74.5	-64.3			120.7	564.3	124.1	11.7	1.000000
62000.0	72.7	-63.3			117.3	564.3	299.9	13.0	1.000000
62500.0	70.9	-62.4			114.0	560.5	97.1	14.1	1.000000
63000.0	69.2	-61.7			111.0	567.2	53.2	13.7	1.000000
63500.0	67.6	-61.2			108.1	567.8	59.4	13.4	1.000000
64000.0	65.9	-60.7							

STATION ALTITUDE 4010.40 FEET MSL
24 JULY '41 150n HRS MDI
ASSEMBLY, IN. 0.8

UPP, R AIR DATA
2050220060
NW 30

STATION COORDINATES
32° 00' 49" LAT DEG
106° 49' 14" LON DEG

TABLE 16 CONT'
GEOPH. TELL PRESSURE TEMPERATURE REL.HUM. DE.SITY SLEEV OF "IND. DATA
ALTITUDE AIR DEPOINT PERCENT GM/CURR. SOUND INCLINATION SPEED
MSL FEET MILLIBARS DEGREES CENTIGRADE FT KNOTS
DEGREES (IN) KNOTS REFLECTION

04000.0	64.3	-60.2		105.2	568.5	100.3	13.1	1.000023
04500.0	62.8	-59.4		102.4	569.6	98.6	14.1	1.000023
05000.0	61.3	-58.6		99.5	570.7	97.0	15.1	1.000022
05500.0	59.9	-57.8		98.8	571.7	95.7	16.1	1.000022
06000.0	58.4	-57.0		94.3	572.3	94.9	16.7	1.000021
06500.0	57.0	-57.6		92.2	572.0	94.2	17.4	1.000021
07000.0	55.7	-57.7		90.1	571.8	93.5	18.0	1.000020
07500.0	54.4	-57.9		88.0	571.6	93.1	17.8	1.000020
08000.0	53.1	-58.1		86.0	571.3	92.6	17.6	1.000019
08500.0	51.8	-58.3		84.0	571.1	92.4	17.4	1.000019
09000.0	50.6	-57.5		81.7	572.1	91.9	17.5	1.000018
09500.0	49.4	-56.8		79.6	573.0	90.9	17.5	1.000018
10000.0	48.2	-56.4		77.5	573.3	99.9	17.6	1.000017
10500.0	47.1	-56.0		75.0	574.0	85.4	19.4	1.000017
11000.0	46.0	-55.7		73.7	574.5	81.7	21.4	1.000016
11500.0	44.9	-55.3		71.8	575.0	78.6	23.4	1.000016
12000.0	43.9	-54.9		70.0	575.5	76.8	25.1	1.000016
12500.0	42.8	-54.5		68.3	576.0	75.4	26.8	1.000015
13000.0	41.8	-54.2		66.6	576.4	74.2	28.6	1.000015
13500.0	40.9	-54.5		65.1	576.0	74.3	30.4	1.000014
14000.0	39.9	-54.8		63.7	575.6	75.4	32.5	1.000014
14500.0	38.0	-55.1		62.3	575.3	76.4	34.5	1.000014
15000.0	36.1	-54.1		60.6	576.6	77.0	36.4	1.000013
15500.0	37.2	-53.1		58.9	577.9	81.2	37.6	1.000013
16000.0	36.3	-52.2		57.3	579.1	84.6	38.9	1.000013
16500.0	35.5	-51.2		55.7	580.4	87.6	40.3	1.000012
17000.0	34.7	-50.2		54.2	581.7	90.9	40.1	1.000012
17500.0	33.9	-49.7		52.6	582.3	94.1	39.3	1.000012
18000.0	33.1	-49.5		51.6	583.6	97.5	38.6	1.000011
18500.0	32.4	-49.3		50.3	582.9	100.6	38.0	1.000011
19000.0	31.6	-49.0		49.1	583.2	101.1	36.7	1.000011
19500.0	30.9	-48.8		48.0	583.5	101.0	35.4	1.000011
20000.0	30.2	-48.6		46.8	583.8	102.1	34.1	1.000010
20500.0	29.5	-48.4		45.7	584.1	101.6	32.9	1.000010
21000.0	28.8	-48.2		44.7	584.2	100.4	31.7	1.000010
21500.0	28.2	-48.1		43.6	584.4	99.0	30.6	1.000010
22000.0	27.6	-47.9		42.6	584.0	97.4	29.4	1.000009
22500.0	26.9	-47.8		41.6	584.8	96.2	29.3	1.000009
23000.0	26.3	-47.6		40.7	585.0	95.4	29.4	1.000009
23500.0	25.7	-47.5		39.7	585.2	94.6	29.5	1.000009

STATION ALTITUDE 4310.40 FEET MSL
24 JULY 61 1500 HRS MD
ASCENSION ISL.

UPP.R AIR DATA
2050220000
NW 30

TABLE 16 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CELIGRADE	REL.HUM. PERCENT	AIR DEWPOINT DEGREES CELIGRADE	DE.SITY GM/CUBIC METER	SOUND KNOTS	DIRECTION DEGREES (TN)	INDEX OF REFRACTION
84000.0	23.0	-47.4	38.8	38.4	95.7	29.7	1.00009	
84500.0	24.6	-47.2	37.9	38.6	95.6	30.4	1.00008	
85000.0	24.0	-47.1	37.0	38.8	95.4	31.2	1.00008	
85500.0	23.5	-46.9	36.1	39.1	95.3	31.9	1.00008	
86000.0	23.9	-46.8	35.3	39.2	92.6	32.6	1.00008	
86500.0	22.4	-46.6	34.5	39.4	91.5	33.2	1.00008	
87000.0	21.9	-46.3	33.7	39.7	90.4	33.9	1.00007	
87500.0	21.4	-46.0	32.9	39.1	89.4	34.5	1.00007	
88000.0	20.9	-45.7	32.1	38.5	89.6	34.2	1.00007	
88500.1	20.5	-45.4	31.3	38.9	89.7	34.0	1.00007	
89000.0	20.0	-45.1	30.6	38.3	89.8	33.8	1.00007	
89500.0	19.6	-44.8	29.9	38.7			1.00007	
90000.0	19.1	-44.4	29.1	38.2			1.00006	
90500.0	18.7	-44.1	28.5	38.0			1.00006	
91000.0	18.3	-43.7	27.8	39.1			1.00006	
91500.0	17.9	-43.4	27.1	39.5			1.00006	

EQUATORIAL COORDINATES
32.88497 LAT DEG
106.49714 LONG DEG

STATION ALITUDE 4010.40 FEET MSL
24 JULY 01 1500 HRS MDT
ASCENSIOI. NO. 68

MANISTORY LEVELS
215022U000

NW 30

GEODETIC COORDINATES
32.68497 LAT E_E
106.49714 LONG E_E

TABLE 17

PRESSURE GEOPOTENTIAL MILLIBARS	FEET	TEMPERATURE			REL.HUM. PERCENT	WIND DATA DEGREES(TN) KNOTS
		AIR DEGREES	DEGREE POINT CENTIGRADE	REL.HUM. PERCENT		
650.0	4960.	33.3	10.6	25.	69.4	3.7
600.0	6739.	27.8	9.4	31.	101.0	6.8
750.0	8597.	21.9	7.1	38.	211.0	3.2
700.0	10544.	16.6	4.9	46.	249.3	12.6
650.0	12599.	11.5	1.7	51.	265.1	10.5
600.0	14774.	5.6	-3.1	53.	248.8	4.9
550.0	17087.	.2	-7.1	56.	267.1	6.4
500.0	19569.	-5.6	-13.2	55.	250.2	9.0
450.0	22260.	-10.0	-29.5	18.	204.1	16.1
400.0	25202.	-16.6	-34.2	20.	202.0	20.8
350.0	28457.	-22.8	-33.3	37.	212.5	15.2
300.0	32101.	-32.2	-47.5	20.	210.8	16.7
250.0	36257.	-40.8			237.6	14.1
200.0	41114.	-52.5			280.4	14.2
175.0	43903.	-59.2			272.2	14.6
150.0	47020.	-65.7			297.5	16.6
125.0	50621.	-69.2			316.2	7.4
100.0	54963.	-69.5			59.6	1.4
80.0	59378.	-66.2			178.5	8.4
70.0	62057.	-61.9			98.2	15.6
60.0	65212.	-57.9			95.9	16.0
50.0	68936.	-57.0			91.3	17.5
40.0	73657.	-54.8			75.2	32.1
30.0	79794.	-48.5			102.2	33.9
25.0	83741.	-47.3			93.7	24.8
20.0	88603.	-45.1			89.3	33.8

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL
24 JULY 1970 1700 HRS PDT
ASCENSION ISL.

SUPERFICIAL LT. VILL LAT.
20500.000000

GEODETIC COORDINATES
33.16712 LAT DEG,
106.49511 LONG DEG

TABLE 18

PRESSURE MILLIBARS	GEOMETRIC MSL FELL	ALTITUDE FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT
673.8	4051.0	34.7	10.5	58.0
869.0	4250.1	35.7	13.2	66.0
850.0	4874.4	33.5	12.5	26.0
700.0	10487.5	17.8	5.1	43.0
649.0	12594.2	11.9	3.4	56.0
587.4	15306.0	4.3	0.3	75.0
569.5	16132.9	2.2	-4.4	83.0
553.0	16913.2	.8	-10.8	71.0
528.2	18121.5	-1.8	-10.5	70.0
500.0	19549.3	-5.4	-10.0	70.0
479.4	20633.5	-6.8	-17.2	43.0
448.4	22337.6	-10.8	-24.6	31.0
438.6	22895.1	-12.2	-23.6	38.0
431.2	23322.5	-13.3	-17.3	72.0
411.4	24497.5	-14.7	-25.0	41.0
404.4	24925.1	-14.9	-26.0	38.0
400.0	25197.2	-15.6	-25.5	42.0
394.0	25572.3	-16.1	-25.0	55.0
390.6	25787.0	-16.5	-25.1	47.0
343.4	28928.8	-23.9	-30.7	24.0
337.2	29366.7	-23.9	-39.1	23.0
360.0	32136.7	-31.0	-40.1	40.0
250.0	36303.5	-41.5	-50.4	37.0
233.0	37863.6	-45.6		
200.0	41163.5	-52.9		
183.8	42942.3	-57.1		
166.2	45017.6	-62.1		
150.0	47089.4	-65.8		
134.0	49212.6	-69.0		
124.2	50029.8	-68.5		
167.4	53672.0	-73.0		
100.0	55065.0	-69.5		
78.8	59843.1	-61.9		
70.0	62268.5	-60.8		
57.4	66365.2	-58.7		
50.0	69258.3	-54.3		
45.0	71496.7	-53.1		

STATION ALTITUDE 4,510.00 FEET MSL
24 JULY 01 1700 HRS MDT
ASCENSION 140. 88

UPPER AIR DATA
2050030080
JALLEN

TABLE 19

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SOUND SPEED KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND SPEED KNOTS	INDEX OF REFRACTION	
4051.0	875.8	34.7	18.3	38.0	979.8	686.7	220.0	5.1	1.000303
4500.0	860.7	34.8	12.9	26.8	967.3	685.9	208.0	4.8	1.000275
5000.0	840.3	33.1	12.4	28.3	956.4	684.0	194.0	4.6	1.000271
5500.0	831.8	31.6	11.9	29.7	944.4	682.4	180.6	5.1	1.000267
6000.0	817.5	30.4	11.3	31.0	932.4	680.6	164.7	3.9	1.000263
6500.0	803.5	29.0	10.8	32.3	920.9	679.2	214.5	2.7	1.000259
7000.0	789.7	27.6	10.2	33.7	909.5	677.6	255.2	4.3	1.000255
7500.0	770.2	26.2	9.5	35.0	898.2	675.9	268.3	6.2	1.000251
8000.0	764.9	24.8	8.8	36.4	887.1	674.3	275.8	7.7	1.000246
8500.0	749.8	23.4	8.1	37.7	876.1	672.7	275.1	8.1	1.000242
9000.0	737.0	22.0	7.4	39.0	865.4	671.0	270.3	8.7	1.000238
9500.0	724.3	20.6	6.9	40.4	854.7	669.4	260.4	8.9	1.000233
10000.0	711.9	19.2	5.9	41.7	844.2	667.7	265.3	8.9	1.000229
10500.0	699.7	17.8	5.1	43.1	833.9	666.1	269.6	8.9	1.000225
11000.0	687.2	16.4	4.8	46.2	823.0	664.4	291.8	9.1	1.000222
11500.0	675.0	15.0	4.4	49.2	812.3	662.8	294.4	9.0	1.000219
12000.0	663.0	13.6	4.0	52.3	801.8	661.2	297.6	8.8	1.000216
12500.0	651.2	12.2	3.5	55.4	791.5	659.6	298.2	8.2	1.000213
13000.0	639.4	10.8	3.0	58.8	781.0	657.9	293.0	7.3	1.000210
13500.0	627.7	9.4	2.5	62.3	770.6	656.5	264.9	6.2	1.000207
14000.0	616.3	8.0	2.0	65.8	760.4	654.6	275.4	5.5	1.000203
14500.0	605.1	6.6	1.4	69.4	750.4	652.9	264.4	5.0	1.000200
15000.0	594.0	5.2	.7	72.9	740.5	651.3	222.7	5.0	1.000196
15500.0	583.2	3.8	.1	76.9	730.6	649.6	241.0	5.2	1.000193
16000.0	572.3	2.5	-3	81.7	720.4	646.1	240.7	6.0	1.000190
16500.0	561.7	1.5	-2.0	77.4	709.8	646.8	251.6	6.9	1.000185
17000.0	551.2	.6	-4.0	70.9	699.2	645.6	255.9	8.1	1.000179
17500.0	540.8	-5.5	-5.1	70.5	688.9	644.3	253.9	9.3	1.000175
18000.0	530.6	-1.5	-6.3	70.1	678.7	642.9	250.9	10.4	1.000171
18500.0	520.6	-2.5	-7.4	70.0	669.0	641.4	247.1	10.9	1.000167
19000.0	510.7	-4.0	-8.7	70.0	659.4	639.9	242.0	11.2	1.000164
19500.0	500.9	-5.5	-9.9	70.0	650.1	638.3	234.2	11.3	1.000160
20000.0	491.3	-6.0	-12.7	58.8	639.5	637.3	225.9	11.7	1.000155
20500.0	481.9	-6.6	-16.2	46.3	629.0	636.4	217.9	12.6	1.000149
21000.0	472.6	-7.7	-18.8	40.4	619.4	635.1	211.0	13.4	1.000145
21500.0	463.4	-8.8	-20.9	36.9	610.2	633.7	205.2	14.1	1.000142
22000.0	454.4	-10.0	-23.0	33.4	601.1	632.2	202.9	15.2	1.000139
22500.0	445.5	-11.2	-24.2	33.0	592.1	630.7	205.4	16.6	1.000137
23000.0	436.8	-12.5	-21.6	46.3	583.1	629.5	208.5	17.9	1.000136
23500.0	428.1	-13.5	-18.2	67.3	573.7	625.1	212.2	19.0	1.000136

GEODETIC COORDINATES
53.16712 LAT LE.,
106.49511 LON LE.,

STATION ALTITUDE 4,510.00 FEET MSL
 24 JULY 01 1700 HRS MDT
 ASCENSUS, NO. 88

PP, R AIR DATA
 21500300B6
 JALLEN

ORDINARY COORDINATES
 33°16'7.12 LAT DEC
 106°49'51.11 LONG DEC

TABLE 19 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (IN)	SPEED KIOTS	INDEX OF REFRACTION
44000.0	415.7	-14.1	-21.3	54.1	563.6	627.3	215.2	19.2
44500.0	411.4	-14.7	-25.0	41.0	554.1	626.5	212.6	18.6
45000.0	405.2	-15.1	-25.9	39.1	543.9	626.0	210.6	18.2
45500.0	395.1	-16.0	-23.4	52.5	534.9	625.0	208.6	17.8
46000.0	387.2	-17.0	-26.0	45.4	526.2	623.7	207.0	17.4
46500.0	379.3	-18.2	-27.9	41.8	518.0	622.3	205.9	17.3
47000.0	371.7	-19.4	-30.0	38.1	509.9	620.8	205.5	17.6
47500.0	364.1	-20.5	-32.1	34.5	501.9	619.3	207.5	17.8
48000.0	359.7	-21.7	-34.3	30.8	494.1	617.9	210.3	18.0
48500.0	349.5	-22.9	-36.6	27.1	486.4	616.4	212.1	17.8
49000.0	342.4	-23.9	-38.7	23.8	478.4	615.1	214.7	17.4
49500.0	335.3	-24.2	-39.0	23.8	469.2	614.7	223.1	16.3
50000.0	328.3	-25.5	-39.0	26.9	461.8	613.1	228.0	15.3
50500.0	321.5	-26.8	-39.1	30.0	454.5	611.5	234.0	14.3
51000.0	314.7	-28.1	-39.3	33.0	447.3	609.9	236.9	14.7
51500.0	308.2	-29.4	-39.6	36.1	440.3	608.3	239.4	15.2
52000.0	301.7	-30.6	-40.0	39.2	433.4	606.7	240.5	15.3
52500.0	295.3	-31.9	-41.0	39.7	426.3	605.1	240.7	15.4
53000.0	289.9	-33.2	-42.2	39.4	419.3	603.6	234.6	15.8
53500.0	284.6	-34.4	-43.5	39.0	412.4	602.0	229.3	16.4
54000.0	279.5	-35.7	-44.7	38.7	405.6	600.4	224.0	16.9
54500.0	270.5	-37.0	-45.9	38.3	398.9	598.8	219.0	17.6
55000.0	264.7	-38.2	-47.2	37.9	392.4	597.2	221.5	17.2
55500.0	259.9	-39.5	-48.4	37.6	386.0	595.6	227.1	16.5
56000.0	255.3	-40.7	-49.6	37.2	379.7	593.9	233.7	16.0
56500.0	247.8	-42.0	-52.0	32.3*	373.4	592.3	241.2	15.6
57000.0	242.3	-43.3	-56.9	20.5**	367.2	590.0	247.0	15.7
57500.0	236.9	-44.6	-64.5	8.6**	361.1	588.9	250.6	16.1
58000.0	231.5	-45.9			354.9	587.3	254.4	16.3
58500.0	226.2	-47.0			348.5	585.6	258.4	16.2
59000.0	221.1	-48.1			342.2	584.4	263.3	15.6
59500.0	216.0	-49.2			336.0	583.0	269.6	14.9
40000.0	211.1	-50.3			330.0	581.5	275.5	14.5
40500.0	206.2	-51.4			324.0	580.1	280.5	14.4
41000.0	201.5	-52.5			318.2	579.6	285.6	14.0
41500.0	196.8	-53.7			312.4	577.1	290.9	13.5
42000.0	192.2	-54.9			306.8	575.6	293.7	13.3
42500.0	187.7	-56.1			301.2	574.0	294.2	13.2
43000.0	183.5	-57.2			295.7	572.4	290.4	13.2
43500.0	178.9	-58.4			290.3	570.8	282.6	13.4

* * AT LAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN INTERPOLATION.

SATION ALTITUDE 4351.00 FEET MSL
24 JULY 11 1700 HRS MDT
ASCNTR. NO. 88

UPPER AIR DATA
2050030000
JALLEN

TABLE 19 CON'T

GEOM. ALT.	PRESSURE, MILLIBARS	TEMPERATURE DEGREES CEL. / GRADE	REL. HUM. PERCENT	DENSITY GM./CUBIC METER	SPD OF SOUND KNOTS	WIND DATA DIR & DIST (TN)	SPD KNOTS	INDEX OF REFRACTION
44600.0	174.6	-59.6			284.9	569.0	277.6	14.0
44500.0	170.4	-60.9			279.7	567.6	276.5	14.8
45000.0	169.3	-62.1			274.5	566.8	276.5	15.5
45500.0	162.3	-63.0			269.0	564.8	279.9	16.2
46000.0	159.3	-63.9			263.5	563.6	282.0	17.0
46500.0	154.4	-64.7			258.2	562.4	280.5	16.1
47000.0	150.7	-65.6			252.9	561.2	295.7	19.3
47500.0	149.9	-66.4			247.6	560.1	295.7	20.9
48000.0	143.3	-67.2			242.3	559.1	297.1	22.6
48500.0	139.7	-67.9			237.2	558.1	297.2	23.3
49000.0	130.2	-68.7			232.1	557.1	291.7	19.9
49500.0	132.9	-68.9			226.6	556.8	263.9	16.7
50000.0	129.5	-68.8			220.8	557.0	270.2	13.2
50500.0	120.3	-68.6			215.1	557.2	248.2	10.5
51000.0	125.1	-68.8			209.9	556.9	220.4	10.0
51500.0	120.0	-69.6			205.4	555.9	216.2	10.0
52000.0	117.0	-70.4			201.0	554.8	211.9	10.0
52500.0	114.0	-71.1			196.7	553.7	208.1	9.6
53000.0	111.2	-71.9			192.4	552.6	204.0	8.9
53500.0	108.3	-72.7			188.3	551.5	199.5	8.3
54000.0	105.6	-72.2			183.1	552.3	195.9	7.8
54500.0	102.9	-70.9			177.3	554.0	191.8	7.5
55000.0	100.3	-69.7			171.8	555.7	195.5	8.2
55500.0	97.9	-68.8			166.8	556.9	200.3	9.2
56000.0	95.4	-68.0			162.1	558.0	205.7	10.2
56500.0	93.1	-67.2			157.5	559.1	206.0	10.8
57000.0	90.8	-66.4			153.0	560.1	208.1	11.4
57500.0	88.6	-65.6			148.7	561.2	217.7	8.1
58000.0	86.4	-64.8			144.5	562.3	242.0	4.9
58500.0	84.3	-64.0			140.4	563.4	297.1	3.3
59000.0	82.2	-63.2			136.4	564.4	21.1	4.2
59500.0	80.2	-62.4			132.5	565.5	45.0	8.7
60000.0	78.2	-61.3			128.9	566.3	12.2	11.0
60500.0	76.3	-61.6			125.7	566.6	64.2	13.3
61000.0	74.5	-61.4			122.5	566.9	97.3	15.8
61500.0	72.7	-61.1			119.4	567.2	155.4	15.6
62000.0	70.9	-60.9			116.4	567.5	113.6	15.6
62500.0	69.2	-60.7			113.5	567.9	107.8	14.7
63000.0	67.6	-60.4			110.6	568.2	110.4	14.0
63500.0	65.9	-60.2			107.9	568.5	93.7	13.5

STATION ALTITUDE 4351.00 FT ET MSL
21 JULY 31 1700 HRS MDT
ASCENSION 0.0.

IPPR AIR UNI
20500 JU088
JALLEN

GEODETIC COORDINATES
33.1671° LAT DEG
106.4951° LONG DEG

TABLE 19 CONT'

DEUTERIUM ALTITUDE MSL FELT	PRESSURE MILLIBARS	TEMPERATURE AIR DEWEPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT	SPEED OF SOUND KNOTS METER	DIRECTION DEGREES (IN) REFRACTION	WIND DATA KNOTS	INDEX OF REFRACTION
64000.0	64.4	-59.9		105.2	568.9	87.3	13.0
64500.0	62.8	-59.7		102.5	569.2	82.4	12.9
65000.0	61.3	-59.4		99.9	569.0	84.3	13.1
65500.0	59.9	-59.1		97.4	569.9	86.1	13.3
66000.0	58.4	-58.9		95.0	570.3	81.4	15.5
66500.0	57.0	-58.5		92.6	570.8	76.8	18.4
67000.0	55.7	-57.7		90.1	571.0	73.2	20.6
67500.0	54.4	-57.0		87.6	572.0	69.7	21.5
68000.0	53.1	-56.2		85.3	573.0	66.6	22.6
68500.0	51.8	-55.5		83.0	574.0	60.1	22.5
69000.0	50.6	-54.7		80.7	575.0	65.6	22.5
69500.0	49.4	-54.2		78.6	576.5		1.000016
70000.0	48.3	-53.9		76.7	578.0		1.000017
70500.0	47.2	-53.6		74.8	577.2		1.000017
71000.0	46.1	-53.4		73.0	577.6		1.000016

STATION ALTIMETER 4351.00 FEET MSL
24 JULY 01 1700 HRS MDI
ASCRIBED NO. 63

MANDATORY LEVELS
2050030000
JALLEN
TABLE 20

MILLIBARS	FEET	PRESSURE GEOPOTENTIAL DEGREES	TEMPERATURE AIR DEGREE CENTIGRAVE	REL.HUM. PERCENT	DIR. DATA	
					DIRECTION DEGREES (TN)	SPEED KNOBS
650.0	4871.	33.5	12.5	28.	197.0	4.0
800.0	6655.	28.6	10.6	33.	231.5	3.0
750.0	8520.	23.4	8.1	38.	275.2	6.2
700.0	10478.	17.8	5.1	43.	289.8	6.9
650.0	12539.	12.0	3.5	56.	296.0	6.1
600.0	14718.	5.0	1.1	71.	259.0	5.0
550.0	17036.	-5.5	-4.2	71.	256.2	6.2
500.0	19523.	-5.4	-10.0	70.	233.3	11.4
450.0	22214.	-10.6	-24.2	32.	204.1	15.8
400.0	25156.	-15.6	-25.5	42.	210.0	16.0
350.0	28419.	-22.8	-36.4	27.	214.7	17.8
300.0	32073.	-31.0	-40.1	40.	240.2	15.3
250.0	36225.	-41.5	-50.4	37.	238.0	15.7
200.0	41065.	-52.9			287.1	15.9
175.0	43848.	-59.5			278.0	15.9
150.0	46963.	-65.8			293.0	14.5
125.0	50558.	-68.5			257.0	10.0
100.0	54896.	-69.5			195.9	6.3
80.0	59340.	-62.4			43.2	6.7
70.0	62056.	-60.8			111.3	15.2
60.0	65214.	-59.2			85.9	15.3
50.0	69000.	-54.3				

WORLD FILE COORDINATES,
33.16712 LAT LT,
106.49511 LON DEG

**IN
DATE**